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NEWS SUMMARY

GENERAL

Schild's wife free — Pope

Pope John Paul announced that the kidnapped wife of British electronics engineer Rolf Schild was released eight weeks ago. The Pope also appealed for the release of the Schild's daughter Anabelle, 15.

His surprise announcement to a crowded St. Peter's Square ends a carefully observed news blackout by British media. His appeal, he said, was made with the family's agreement.

Mr. Schild, 55, his wife Daphne, 51, and his daughter were seized last year near their Syrian holiday home.

Olympic boycott

Many Tory MPs may refuse to support the Government's call for a boycott of the Moscow Olympics today's Commons debate unless it is matched by further trade sanctions against Russia. Back Page

Soames returns

Rhodesia's Governor Lord Soames flew home for brief talks on future relations between Britain and Zimbabwe amid reports in Salisbury that Methodist minister Rev. Canaan Banana will become president of the republic. Page 2

Confidence vote

Italy's minority Christian Democratic government is expected to face and lose a parliamentary vote of confidence this week, throwing the country into its 42nd government crisis since the War. Back page

Corruption probe

Attorney General Sir Michael Havers admitted that police officers had fabricated evidence against criminals to stop them from giving evidence to the Operation Countryman probe into London police corruption.

Early leaders

Iran's pro-clergy Islamic Republican Party emerged as early leaders from Friday's parliamentary election winning 20 of the 84 seats so far declared. President Bani-Sadr's supporters won seven. Page 2

Moroccan defeat

Moroccan troops appeared to have surrendered a large part of southern Morocco to West Saharan Polisario guerrillas after an 11 day battle. The guerrillas claim they killed 2,000 troops.

BL sales up

BL said the 10 per cent price cut offer on its Maxi cars was paying off with sales up 50 per cent for the first 10 days of March compared with February.

Ford stays out

Former U.S. President Gerald Ford decided not to run against Ronald Reagan for the Republican's presidential nomination because it might split the party. Page 3

Tito still grave

President Tito, still critical, rallied slightly and his death reported signs of an improvement in his weakened heart and a halt to the spreading of pneumonia.

Briefly . . .

Winner of £100,000 premium bond prize is 6TP 688776 (London), £50,000 prize winner is 18VB 595022 (Manchester) and the £25,000 winner is 4DL 573841 (Cardiff).

BUSINESS

Continent wins deal for Irish phones

THE IRISH GOVERNMENT is placing orders worth at least £200m (about \$185.1m) for telephone switching equipment with CIT-Alcatel of France and L. Ericsson, of Sweden. The orders, won against fierce international competition, are the first phase of a five-year plan to modernise Ireland's phone network. Back Page

GENERAL CONTROLS on UK imports to help industry and relieve unemployment were strongly criticised by leading economists at a Bank of England meeting. Back Page

FURTHER RESTRAINTS

will not be imposed on clothing and textiles imports, Mr. John Nott, Secretary for Trade, has indicated. Page 2

U.S. MONEY SUPPLY: M1-A

\$374.5bn (\$374.7bn); M1-B \$391.4bn (\$391.2bn).

COMPANIES

A. JOHNSON and Company, UK member of the Axel Johnson group of Sweden, has won a contract worth nearly £3m to supply the Soviet Union's first soft margarine plant processing line. Page 2

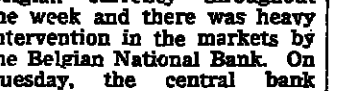
SVENSKA CELLULOSE

Sweden's biggest forest products group, reported 1979 pre-tax earnings of SKr 537m (£56.5m) compared with 1978's SKr 273m. Page 16

CURRENCIES

BELGIAN FRANC fell within the European Monetary System to level on Friday at which the authorities are expected to take corrective action. Rumours of an imminent devaluation depressed Belgian currency throughout the week and there was heavy intervention in the markets by the Belgian National Bank. On Tuesday, the central bank increased Treasury bill rates, and on Friday the rate paid by commercial banks for special advances was raised 31 per cent to 18 per cent. Other rates including the discount rate of 12 per cent, were unchanged. The French franc and Dutch guilder remained firm, with the French currency returning to the top of the system. The Deutschmark required further support from the Bundesbank as it fell against the dollar.

EMS MARCH 14, 1980



The chart shows the two constraints on the European Monetary System exchange rates. The lower chart shows the divergence from the central rate against the European Currency Unit (ECU), itself a basket of European currencies.

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Survey: India ... Inset

'Restraint and discipline' need stressed

Carter awaits 'risk package' reaction

BY JUREK MARTIN, US EDITOR IN WASHINGTON

THE CARTER Administration was nervously awaiting yesterday the reaction of American and world financial markets to the substantive anti-inflation measures unveiled late on Friday.

At the weekend senior officials guardedly agreed that risks of a recession had probably been enhanced by the fiscal and credit control package.

Mr. G. William Miller, the Treasury Secretary, said: "We're taking the risk of more restraint and more discipline, even though it has some problems in its own right."

Referring to the collapse of the bond market, which triggered the Government's intensification of its anti-inflation programmes, he added: "The changing atmosphere will in due course, and I can't tell you when, bring back the normal operation of those markets."

Mr. Paul Volcker, chairman of the Federal Reserve Board, now more than ever in the front line of the war against inflation, said that the new measures need not necessarily result in another surge in interest rates, but were designed to impress on leaders the imperative of reducing their borrowing.

Most analysts expect a further jump in short-term rates in the immediate future. The prime rate stands at about 18 1/2 per cent, varying a bit

from bank to bank, and the monetary authorities are nervous about too sharp and too sudden a further increase.

Mr. Volcker admitted that a main reason for implementing the split discount rate rather than applying the 3 per cent increase across the board was the fear that this could produce too big a jump in short-term rates, thus further dislocating the markets.

Under the new regime the major money centre banks will be charged 16 per cent if they use the Fed's discount window frequently. The discount window is supposed to be used only to meet exigencies, but some big banks have been bor-

rowing from the Fed at 13 per cent and re-lending to commercial customers at the higher prevailing commercial rates.

Package in full, Pages 14, 15
Feature and Editorial Comment, Page 10
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Japan package soon, Back Page

Mr. Volcker predicted that the curbs on consumer credit, which has been growing at an annual rate of nearly 20 per

cent in the last two months, would be "broadly felt." The main reason why the U.S. economy has avoided a recession over the last year has been the extraordinary resilience of consumer spending.

The Fed chairman also wryly observed that previous restraints on credit had helped the strength of the dollar. "We're not doing anything here," he said, "that is damaging to the dollar."

General reaction to the package has not been marked with enthusiasm. Both business and financial leaders have claimed that the President's fiscal

Continued on Back Page

MAIN PROPOSALS TO SLOW INFLATION RATE

President Carter's main proposals:

- Government spending cuts of \$13bn-\$14bn. Freeze on Federal employment. Spending cuts across the board, excluding defence.
- \$3bn to be raised by withholding tax on interest and dividend payments at source.
- Tax of \$4.62 a barrel on imported oil to lift petrol price in U.S. by 10 cents a gallon and raise \$10bn.
- 1981 Budget in balance without oil tax; possible surplus of \$15bn with oil tax.
- Wages and prices. Step-up

In monitoring of voluntary wage and price guidelines by trebling staff of Council on Wage and Price Stability.

● Commission to study ways of increasing U.S. industrial efficiency.

● Penalty discount rate of 16 per cent for big banks which borrow from the Federal Reserve too frequently. Basic rate remains at 13 per cent.

● Pressure from Fed on banks to cut rate of growth voluntarily in lending activities to below 9 per cent this year, and give priority in lending to productive sectors

of the economy.

● Imposition of 15 per cent non-interest-bearing special deposits with the Fed on certain types of consumer credit, including credit cards.

● An increase from 8 to 10 per cent in the banks' marginal reserve requirements and reduction in the base from which those requirements are calculated.

● A 15 per cent non-interest-bearing special deposit requirement on any increase in money market mutual fund assets, to curb growth of this sector.

Soviet Union gives \$118m oil rig contracts to French companies

BY DAVID SATTER IN MOSCOW

IN ITS FIRST major commercial decision since the U.S. announcement of trade sanctions, the Soviet Union has awarded contracts worth \$118m, for fabrication yards to produce oil rigs for use in the Caspian Sea, to two French companies.

The contracts, which were signed between Sudimport, the Soviet foreign trade organisation, and the French companies, Entrepose GTM pour les Travaux Pétroliers Maritimes and Union Industrielle et d'Entrepôts, represent the first big step by the Soviet Union to improve its offshore oil exploitation methods. With the USSR's onshore oil

production slowing down, the development of offshore oil and gas deposits is expected to be a major goal in the 1981-85 five-year plan, now being drawn up. The Soviet offshore equipment market may reach \$24bn in the next decade.

The selection of the two French firms over other international consortium bidders, including Wimpey, Brown and Root and British Petroleum of the UK, and a joint Mitsubishi-McDermott group—both of which are experienced in the offshore field—had particular significance. A Dutch group was also among the unsuccessful bidders.

It may reflect Soviet reluctance to deal with Britain and the U.S. in the present political atmosphere and could open the way for extensive French participation in Soviet offshore oil development. The Russians want to develop their offshore oil and gas resources in the Barents Sea, Siberia and off Sakhalin Island in the Sea of Okhotsk.

The agreement includes two contracts for a fabrication yard in Baku to make oil rigs to be used in waters with a depth of 200 metres, and one contract for equipment to be used in a Soviet-built yard at Astrakhan where "modules" for the rigs—

living facilities and diving equipment—are to be attached to them.

The contracts, signed in a ceremony attended by Mr. Nikolai Patolichev, the Soviet Foreign Trade Minister, and Mr. S. Orudzhov, Minister of the Gas Industry, were expected to be followed by the signing of two more contracts with the French companies—for heavy equipment, mainly lifts and giant cranes and submersible barges for transporting the rigs—which may be worth about \$100m.

Most buyers overcoming steel strike

BY ROY HODSON

A NEW assessment of the effects of the steel strike being studied by the industry and Government departments indicates that, after 11 weeks of the stoppage, British industry has arranged sufficient alternative sourcing roughly to balance the absence of the British Steel Corporation from the market.

Theoretically, the strike could continue indefinitely without tangible damage being caused to Britain's industrial production. Whitehall, the steelmakers and the employers' bodies all have reservations about making such a claim, however.

The output of manufacturing industry (excluding British Steel) has been running at about 3 per cent below pre-strike forecasts in recent weeks. The strike is probably the main reason for the fall, but neither industry nor Whitehall believe it is the only reason.

British Steel's usual production level of more than 1m tonnes of finished steel products a month—worth up to £300m at retail prices—represents 2 per cent of Britain's total manufacturing production.

So, if the loss of BSC output is added to that of other manufacturing industry, the strike can be blamed for causing a loss of up to 5 per cent in industrial production.

The latest official reports on the strike's effects show that private-sector steelmakers are maintaining good deliveries and that picketing of their works is light, except in isolated

instances. Steel-using industries are showing ingenuity in making the best use of the supplies they are receiving. The reports say there has been no deterioration in the past month in the quality of the steel delivery services by road transport operators.

Imports are being hampered at a few ports by restrictions on handling steel, but most orders placed with European Community mills and third world countries are being delivered.

On supplies to the motor industry, one official report comments: "While vehicle assembly is in some difficulty in some places it is usually for some more pressing reason than the steel strike."

An indication that steel continues to be relatively plentiful is that traders are not asking "pirate prices." In contrast, many deals are being done below BSC list prices.

Philip Bassett writes: Negotiators from the Iron and Steel Trades Confederation, the main union involved, will meet today to hear a report from Mr. Bill Sims, general secretary, on the negotiations last week with BSC.

The meeting, to be followed tomorrow by a meeting of the union executive, will consider the idea favoured by BSC of putting the present pay offer to a ballot.

Union officials stressed yesterday, however, that it would be only one of the options under consideration. Calls to intensify the strike are likely to be made on Wednesday at a meeting of all unions involved.

Massive spending on energy forecast

BY RAY DAFTER, ENERGY EDITOR

FUEL INDUSTRIES will have to spend between £950bn and £1,175bn (\$2,100bn-\$2,600bn) in meeting the energy needs of non-communist countries over the next 20 years, according to a study by the Royal Dutch/Shell Group.

Shell pointed out that these costs in 1980 prices would cover only the development of energy at the point of production. Further "vast sums" would be needed for the transportation, processing and distribution of fuel and electricity.

The estimates, published in

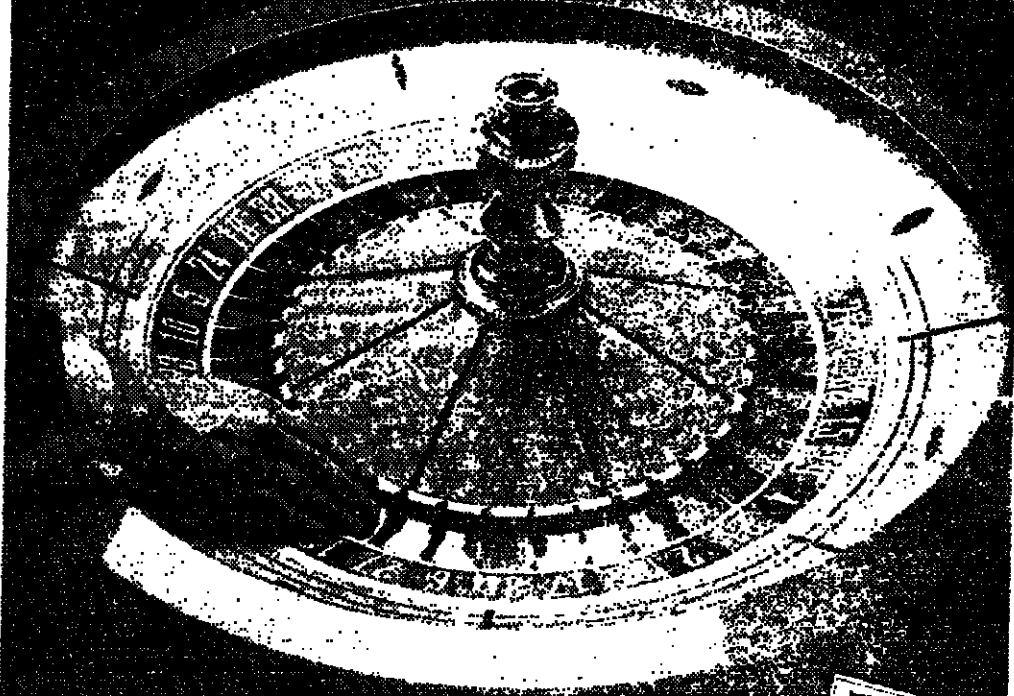
the latest issue of the group's Shell World, indicate that non-communist world energy requirements could increase from the current level, equivalent to nearly 85m barrels a day of oil, to between 140m and 160m barrels a day of oil equivalent by the turn of the century.

Shell sees hydroelectricity, solar power, nuclear energy, coal each accounting for higher proportion of energy supply in the year 2000.

Where Shell sees the money being spent:

Continued on Back Page

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OVERSEAS NEWS

WORLD TRADE NEWS

New impetus to Mid-East initiative

BY OUR FOREIGN STAFF

THE MEETING in Hamburg between Chancellor Helmut Schmidt of West Germany and President Valéry Giscard d'Estaing of France may give extra impetus towards a new Middle East peace initiative by the European Community, and encourage a more precise collective stance on the question of the Palestine Liberation Organisation.

Relations between the Nine and the Arab world were expected to be one important aspect of last night's talks, in particular President Giscard's forthright declaration in favour of the principle of Palestinian self-determination and his clearly stated support for PLO participation in peace negotiations.

Chancellor Schmidt has already endorsed the call made by President Giscard in the joint French-German communiqué two weeks ago.

It followed discussions with the EEC led by Britain on the possibility of a move by the Nine to amend the UN

Security Council Resolution 242 to take account of the principle of Palestinian self-determination.

In an interview given following his talks with President Giscard, King Hussein of Jordan said he anticipated fresh efforts by the EEC to bring about a comprehensive Middle East settlement which "will not have to await conclusion of yet another U.S. Presidential election."

King Hussein told the Beirut-published magazine *Monday Morning* that he expected the French leader to lead an initiative aimed at breaking the "Mid-East deadlock." It would not have to be conducted within the framework of the Camp David accords between Egypt and Israel.

King Hussein spoke of his preference for involving the UN Security Council and both super-powers in the peace process.

Any new initiative would intensify the vigorous campaign being waged by Israel against

any action by the Nine interfering in any way with the Egyptian-Israeli negotiations on autonomy for the inhabitants of the West Bank and Gaza Strip.

When he met Mrs. Thatcher in London last week, Mr. Yigael Yadin, the deputy Israeli Prime Minister, argued that any move by the Nine at this moment could only jeopardise the chance of the U.S.-sponsored negotiations being concluded satisfactorily by the May 26 deadline. He described the talks as "friendly and frank."

On Friday, Mr. Yadin also predicted that another trip to the summit like those held at Camp David would be required if agreement was to be reached.

The Israeli Government, meanwhile, has urged a speed-up in the autonomy negotiations. Mr. Joseph Burg, Minister of the Interior and Chief Israeli participant in the talks, has called Mr. Mustapha Khalil, the Egyptian Premier, and Mr. Sol Linowitz, the U.S. mediator proposing weekly top-level meetings in parallel to those of various

working parties.

Roger Matthews reports from Cairo: Egyptian anger at President Jimmy Carter's Middle East policies surfaced yesterday in an unprecedented attack on the U.S. Administration by one of President Anwar Sadat's closest confidants.

Mr. Carter was "indecisive and unable to rally western support or confront the Soviet Union," Mr. Anis-Mansour, editor of *October* magazine, said in this week's edition. Mr. Mansour's articles are widely accepted as being an accurate reflection of President Sadat's views.

Mr. Carter's recent volte-face over the U.N. Security Council vote on Israeli settlements in the occupied West Bank and Gaza Strip had caused the world to lose confidence in the U.S. President, he went on. Israel and Egypt last night initiated an agreement setting up a direct airlink between them; effective from today, Reuter adds. They will operate three flights a week each between Tel Aviv and Cairo.

Iran delays resuming gas exports to Russia

By Simon Henderson in Tehran

IRAN IS delaying resumption of gas exports to the Soviet Union after pipeline breakages, as a lever for obtaining a higher price for the gas, in current negotiations.

Mr. Ali Akbar Moftakar, Oil Minister, said in Tehran yesterday that the talks had been cut off twice during the past week. After the repairs, "maintenance" may continue until the negotiations are complete.

In the Tehran talks, Iran is asking for a five-fold increase in the present price of 76 cents per 1,000 cu ft, the oil minister said. There was a 30-40 per cent difference between the Iranian position and what the Soviet Union was prepared to pay.

The gas exports flow along the Igat pipeline to the Southern Soviet Republics. Before the Iranian revolution, the contract used to earn Iran about \$270m a year.

In an indication that Iran still wanted to sell gas to the Soviet Union in future, Mr. Moftakar said work was going ahead on a section of the Igat-2 pipeline which had formerly been part of a swap arrangement involving Iranian gas to the Soviet Union, and Soviet gas being sold to Europe.

A 410 km section was being built to connect the Kangan gasfields in the south with Igat-1 he said, and part of the gas would be exported, presumably to the Soviet Union. Igat-2, as a separate project, has already been cancelled.

On Iran's oil policy, the Oil Minister said the country was considering raising this week the premium it applies in contracts above the Iranian official price of \$31 a barrel.

Italy, Brazil consider fighter deal

By Diana Smith in Brasilia

HIGH-LEVEL talks are in the offing that could lead to joint Italy-Brazil production at Embraer, Brazil's Government-run aircraft manufacturer, of the sophisticated new AM-X jet fighter now being developed by Aeritalia and Aermacchi, according to diplomatic officials.

Co-production would involve some measure of Italian financing, technical assistance to Embraer and, possibly, Brazilian-made version of the AM-X would be available for the Brazilian Air Force and for export to Latin America.

General Franco Ferri, vice-chief of staff of the Italian Air Force, and three senior Italian Air Force generals begin visits to Embraer today and official talks with their Brazilian Air Force counterparts.

Aeritalia, which is controlled by Fiat, and Aermacchi are hoping to sell the Italian-made version of the AM-X to NATO, as well as the Italian Air Force.

Belgrade exports

Yugoslavia plans to increase exports to Britain this year by 15 per cent compared with its \$80m exports in 1979, Reuter reports from Belgrade. An agreement between Yugoslavia and the European Common Market, initiated last month, gives Yugoslav goods broad export facilities, would help to offset the country's large trade deficit with Britain, Yugoslav officials said. Yugoslav imports from Britain last year reached \$327m, of which only 23.7 per cent were covered by its exports to Britain.

TAIWAN MISSION TO S. AFRICA

BY BERNARD SIMON IN JOHANNESBURG

THE WEEK-LONG visit to South Africa by Mr. Sun Yun-Suan, the Taiwanese Prime Minister, which ends today has underlined the close political ties between two of the world's so-called leper nations.

It has also highlighted a burgeoning economic relationship, whose rapid growth is probably unmatched by any other two countries 9,000 miles apart.

Two-way trade between South Africa and Taiwan soared from R9m (\$3m) in 1971 to R120.6m (\$57m) in 1979. It almost doubled again last year to around R200m (\$117m).

These figures exclude arms and other strategic commodities which, judging by some clues, are a cornerstone of the two nations' friendship.

Mr. Sun's itinerary has included visits to military bases, and several high-ranking military advisers were among his entourage. Significantly, Taiwan recently awarded official decorations to the armed forces and

Nott rejects added limits to textile, clothes imports

BY RHYS DAVID

MR. JOHN NOTT, the Secretary of State for Trade, has given a firm indication that the Government is not prepared to seek any further tightening of restraints on imports of textiles and clothing into the UK.

Mr. Nott, replying to a letter from Mr. Ben Ford and Mr. Nicholas Winter, chairman of the Lancashire Textile Association, is being described as the worst for 40 years.

Mr. Nott says in his letter that he recognises the difficulties now being caused by the high value of sterling, by changes in fashion and technology and by low and falling demand for some products. He goes on to say that none of these problems makes it sensible for the UK to undermine the established rules governing its trade relations with the rest of the world.

"Millions of jobs depend on the maintenance of open markets for our own exports overseas including textile and clothing exports which alone amounted to £2.1bn in 1979. In considering any protective

measures to deal with the present crisis. In Yorkshire, wool textile industry leaders have been pointing out that closures are beginning to affect recently re-equipped plants, and the pressure on the industry in Lancashire is being described as the worst for 40 years.

Mr. Nott says in his letter that he recognises the difficulties now being caused by the high value of sterling, by changes in fashion and technology and by low and falling demand for some products. He goes on to say that none of these problems makes it sensible for the UK to undermine the established rules governing its trade relations with the rest of the world.

"Millions of jobs depend on the maintenance of open markets for our own exports overseas including textile and clothing exports which alone amounted to £2.1bn in 1979. In considering any protective

barriers to contain imports from abroad we have to give the closest possible attention to the impact of such action on our ability to continue to export," he said.

The Minister confirms the Government's commitment to maintenance of the present GATT Multi-Fibre Arrangement (MFA) and to firm enforcement of the bilateral agreements contained within it. He warns, however, that it would not be possible to negotiate any cut-back of existing quotas on the grounds that this would be contrary to the EEC's international obligations and would be unlikely to command support from the EEC Commission and other member States.

An earlier statement on the possibility of introducing compulsory origin marking for certain consumer goods, including clothing and textiles, is also promised as soon as consultations are completed with the industries concerned.

Scotch subsidy pressure on EEC

BY GARETH GRIFFITHS

THE GOVERNMENT is to step up pressure on its EEC partners in an attempt to break a seven-year deadlock over Scotch Whisky export subsidies amounting to between £42m and £44m.

The amount, which is increasing at the rate of £20m per year, is allocated to compensate for the higher cereal prices paid to the Community. It is payable on the whisky exported outside the EEC. The Scotch Whisky Association puts the proportion of whisky exports outside the EEC at between 65 and 70 per cent of total production.

Ministers have already indicated to the Commission and the Council of Ministers that the delay in the payments which will be activated by the introduction of a common alcohol policy. However while the EEC maintains a "breakthrough" could come by the end of this year, the Government is sceptical.

Mr. Peter Walker, the Agriculture Minister, is understood to have recently pressed the issue with Mr. Fin O'Gundá

lach, the EEC Agriculture Commissioner.

There is some speculation in Whitehall and Brussels that the Government wants the whisky exports to be included under the cereals subsidies and price maintenance.

The recent decision by the

EEC Court of Justice in Luxembourg on February 27 opens the way for this move as both whisky and cognac have been declared agricultural products. Refunds for maize, groats and meal have been paid to the brewing industry, for example, under the cereals regime.

No GATT head decision

BY BRIJ KHANDARIA IN GENEVA

MR. ARTHUR DUNKEL, Switzerland's chief delegate to the recently concluded Tokyo round trade negotiations, is likely to emerge victor in a race for the job of Mr. Olivier Long, Director General of the General Agreement on Tariffs and Trade (GATT).

Mr. Dunkel, whose candidacy was announced earlier this month, appeared well ahead of other candidates. He is strongly backed by the European Community.

Intense private bargaining is expected in coming weeks, and delegation chiefs will meet again early next month to finalise their choice.

Mr. Dunkel's main rival is Mr. Patrick Donner, currently Australia's Ambassador to the Paris-based Organisation for Economic Co-operation and Development (OECD). Mr. Hans Collander, Swedish Ambassador to the OECD, also remains in the running, while Mr. Klaus Sahlgren, currently head of the New York-based UN Centre on Transnational Corporations, has dropped out.

SHIPPING REPORT

Coal trades move ahead smartly

BY WILLIAM HALL, SHIPPING CORRESPONDENT

THE COAL trades have started to move ahead smartly. Admittedly, congestion in America's main coal loading area, Hampton Roads, has reduced the amount of tonnage available, but brokers report that the underlying tone is extremely buoyant.

The rates for transatlantic coal cargoes have risen from \$11.30 per ton to \$13.75 per ton, according to Galbraith Wrightson, and charterers are now being asked to pay up to \$16-18 per ton.

The Japan coal trade is also fairly firm. A 50,000-ton cargo was fixed from Davao, near New Orleans, at \$19.75 per ton, which is fairly indicative of the sort of rates being charged for Japanese cargoes.

As oil prices rise, the demand for coal is expected to go up dramatically over the next few months. The Taiwan Petroleum Corp., for example, has recently undertaken to import 21m tons of steam coal from British Columbia over a 25-year period beginning 1982 and both British and Japanese interests have recently signed additional coal contracts for substantial coal imports from Australia.

At the moment shipowners

are using conventional bulk carriers to transport the coal, but specialised coal carrying ships may soon start to be ordered from the world's shipyards.

In the tanker market, rates remain depressed at around \$10.00 per ton, and many vessels waiting for cargoes in the Arabian Gulf, are in semi-layup. In the Caribbean market, rates have improved, partly because of the bad weather on the Eastern Seaboard of the U.S., which has increased demand for heating and fuel oil.

In the second-hand shipping market, business has been fairly

active. The C. Y. Tung Group, at present bidding for Britain's Furness Withy, is reported to have paid \$23.65m for a 1973 oil/bulk/ore carrier of 113,000 dwt.

Elsewhere, a Greek flag 30,000 dwt bulk carrier (built 1973) has been reported sold, subject to inspection, for just over \$11m.

British flag operators have been in the news of late as a result of the number of ships they have sold. But last week, there were reports that undisclosed British interests had bought three liquefied petroleum gas carriers for \$15m.

World Economic Indicators

INDUSTRIAL PRODUCTION

	U.S.	Feb. '80	Jan. '80	Dec. '79	Feb. '79	% change over previous base year	Index 1967=100
U.S.	152.1	152.6	152.7	151.0	151.0	+1.2	1967=100
UK	112.1	112.5	114.6	105.1	105.1	+6.7	1975=100
Germany	114.4	110.5	137.4	107.1	107.1	+6.8	1970=100
France	136.0	134.0	133.0	132.0	132.0	+3.0	1970=100
Italy	128.7	147.4	157.0	118.6	118.6	+8.5	1970=100
Japan	138.0	138.1	134.7	127.3	127.3	+8.4	1975=100
Holland	125.8	126.0	123.2	122.0	122.0	-0.8	1970=100
Belgium	124.1	121.8	127.0	125.3	125.3	-1.1	1970=100

Lambsdorff to discuss Polish debt

By Roger Boyes in Bonn

COUNT OTTO LAMBSDORFF, the West German Economics Minister, flew to Warsaw yesterday for high-level talks crucial to Poland which is plagued by slow growth, the effects of a poor harvest and a crippling debt service ratio. The talks are expected to deal with wide-ranging Polish proposals for new economic projects, the state of Poland's large foreign debt and with the general health of East-West relations.

The visit is an important political sign that Bonn is prepared to keep open vital trade links with Eastern Europe despite the Soviet invasion of Afghanistan.

The talks were originally scheduled for January but were cancelled at short notice, officially because Warsaw had just put forward plans for joint projects which needed closer study.

Officials are vague on the details of these new projects, but they seem to embrace three main elements. First, the broadening of export credit guarantees to Poland—and thus maintaining the impetus of German trade with Poland, given the increasing wariness of private banks to provide the needed credit backing. Second, Bonn has agreed at the latest meeting of the joint German-Polish economic commission to encourage the import of Polish manufactured goods. Finally, Germany is particularly eager to help exploit Poland's considerable deposits of raw materials, including copper, vanadium and titanium.

Underpinning these considerations, there is Poland's large debt with the West—seriously estimated at about \$17bn and \$18bn. The Lambsdorff trip is not expected to produce any concrete moves forward on this issue but Poland has clearly made various soundings to the West.

It was revealed last week that Poland has discreetly refinanced an official French export credit of over \$312m and agreed to accept much harder terms.

Politically, Count Lambsdorff's visit is in line with Bonn's view that East European countries should be treated differently from the Soviet Union. Germany welcomed the recent Polish call for a European disarmament conference, which seemed to indicate that the East was still prepared to talk on arms control, even after the NATO decision to re-equip its theatre nuclear forces in Europe.

French jobless rise to 1.39m

FRENCH UNEMPLOYMENT rose 0.9 per cent to a seasonally adjusted 1.39m last month, David White reports from Paris. The February figures, which showed an 8 per cent deterioration since the same time last year, marked the fifth consecutive monthly increase in the numbers of unemployed.

Unfilled vacancies, which passed the 100,000 mark in adjusted terms, increased 3.5 per cent since January and more than 26 per cent since February last year. This reflected recent reforms aimed at improving the workings of the National Employment Agency, the Ministry said.

Swiss trade deficit

Switzerland's trade deficit rose to SwFr 1.1bn in February, from SwFr 919m in January and SwFr 355m in February last year, the Federal customs offices said, Reuter reports from Bern. This is the first time the deficit for one month exceeded SwFr 1bn, the office added.

Venezuela cutback

Venezuela plans to cut its oil production by more than 10 per cent to a daily average of less than 2m barrels, the state news agency Venpres reported. Reuter reports from Caracas. Sr Humberto Calderon Bertli, Oil Minister, was quoted as saying the new reduction was caused by "circumstantial market reasons."

Ford stays out of election race

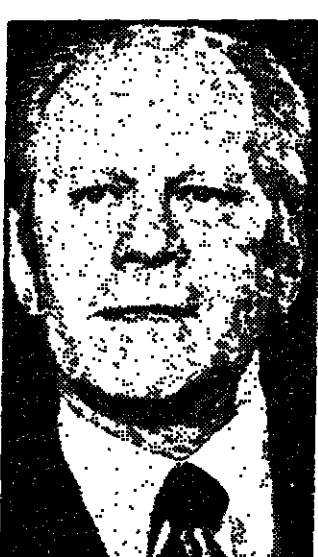
BY JUREK MARTIN, U.S. EDITOR IN WASHINGTON

MR. GERALD FORD, the former U.S. President, will not be a candidate for the Republican Party's Presidential nomination this year, he declared at the weekend.

His decision, after weeks of intense speculation that he would belatedly enter the race, reflects the weight of advice from the party's hierarchy that though he might well be the most electable Republican in the November general election, his chances of getting the nomination were slim and would be potentially costly.

His brief statement, issued from his California desert home, said: "America needs a new President... I have determined that I cannot best that cause by not being a candidate for the President, which might further divide my party. I am not a candidate. I will support the nominee of my party with all the energy I have."

The three remaining contenders—Mr. Ronald Reagan, Mr. John Anderson and Mr. George Bush, all campaigning in Illinois before that State's primary tomorrow, welcomed Mr. Ford's decision.



Mr. Gerald Ford

Logically, Mr. Anderson and Mr. Bush should benefit most from the former President's absence, in so far as he would have appealed to what they see as their prime constituencies on the Centre-Left of the Republican Party.

Mr. Reagan, the clear favourite for the nomination, stands to gain just as much, since neither Mr. Anderson nor Mr. Bush appear to command the breadth of support inside the party seriously to threaten his campaign to carry the party's banner in November.

Mr. Carter was able to enjoy three more apparently decisive victories over Senator Kennedy in preliminary Democratic Party caucuses on Saturday—in Mississippi, South Carolina and Wyoming. In the two Southern States he was rolling up margins of more than 10-1, while in Wyoming, his lead was put at about three-to-one.

The most critical Carter-Kennedy test to date comes tomorrow in Illinois. The Senator's advisers seem more or less resigned to the fact that the President will take the "beauty contest" aspect of the primary there. But they hope that, with the admittedly questionable assistance being provided by Mayor Jane Byrne of Chicago and the Cook County political machine, a closer race will ensue in the battle for Illinois' 173 convention delegates.

Hard-liners winning in Iran poll

BY SIMON HENDERSON IN TEHRAN

THE CLERGYMEN who take a tough position on the release of U.S. hostages in Tehran are emerging as the early leaders as results come in from Friday's elections for the 270-member Iranian parliament.

President Abol Hassan Bani-Sadr has also apparently done badly. With 84 results announced, candidates of the hardline Islamic Republican Party had won 20 seats, while his supporters had won seven.

Independents and smaller parties won three, and the remaining 31 will have to be decided in a run-off election, as successful candidates need at least 50 per cent of the vote.

The Islamic Republicans' strong showing, and the embarrassment it will cause Mr.

Bani-Sadr has already led to accusations of unfair practices at polling stations. The President, in response to these accusations and conceivably as a sign of his intentions, yesterday told the official Paris News Agency that the elections would be declared null and void where there had been malpractice.

Avastollah Khomeini has said the 270-seat Parliament would decide the fate of the 50 hostages, who have been held for four and a half months. The Islamic Republicans still tie the Shah and his wealth, while Mr. Bani-Sadr has been attempting to separate the issues.

Parliament is not expected to start sitting before next month. What appears to have gone wrong for Mr. Bani-Sadr is that

he failed to organise a political structure to follow up his 75 per cent victory in the presidential elections, when the Islamic Republican candidate was heavily defeated.

Most accusations of malpractice have been made against the Islamic Republicans in Tehran, where results are not expected for a few more days, their lists of candidates were said to have been put inside the polling stations, where only the official list of all the candidates should have been available.

Reuter adds from Rome: The Italian Government has authorised the supply to Iran of 10 Chinook helicopters and helicopter spares previously blocked to show disapproval of the holding of the hostages.

Soames flies to London aid talks

BY QUENTIN PEEL IN SALISBURY

LORD SOAMES, the Governor of Rhodesia, left Salisbury last night for London, for talks with his British Government colleagues on aid for the future independent Rhodesia.

Reports in Salisbury suggested that his successor as titular Head of State would be the Rev. Canaan Banana, a Methodist minister from Bulawayo and a former political detainee.

The departure of the Governor for three days of talks, a sign of growing confidence in the post-election stability in Rhodesia, comes as Mr. Mugabe is facing a further round of important decisions on which senior civil servants to choose to head his new Ministry.

Lord Soames' talks with Lord Carrington, British Foreign Secretary, and other members of Mrs. Thatcher's Cabinet, will

cover the whole range of British relations with the new Administration, including military aid, diplomatic training, and assistance with the reorganisation of the Rhodesian broadcasting services.

The expected appointment of the Rev. Banana as the future State President has been rumoured for some time in nationalist circles, as he is a leading supporter of Mr. Mugabe from Matabeleland, home of the minority Ndebele language group, who failed to win a seat in Parliament in the elections.

He has been detained on several occasions since 1975, both initially as a supporter of Bishop Abel Muzorewa, the outgoing Prime Minister, and subsequently as a leader of the

internal movement supporting Mr. Mugabe.

The appointment of the President must wait for the formation of the Senate, the proposed upper house, for which 34 of the 40 members will be elected on Wednesday. The supreme, although only titular position, is filled by an election by the House of Assembly and the Senate sitting together. Final nomination day for the senate is today and the four electoral colleges will sit on Wednesday.

The 20 white members of the assembly will elect 10 senators, the 80 black MPs will elect 14, and the councils of chiefs of Mashonaland and Matabeleland five each. The remaining six will be nominated by the President on the advice of the Prime Minister.

Former Uganda leaders may fight elections

NAIROBI

President Godfrey Binaisa of Uganda has said that Dr. Milton Obote and Mr. Yusuf Lule, the two former presidents, were welcome to return home to contest the Ugandan elections. Radio Uganda said yesterday.

The radio, monitored in Nairobi, quoted Mr. Binaisa as saying the ruling National Liberation Front did not fear contesting elections, due to be held by June 1981, and called on former leaders in exile to return in time to campaign.

Dr. Obote said in Dar-es-Salaam on Wednesday that he would return to Uganda to contest elections there as soon as they were announced. Mr. Lule is living in Britain. Reuter

U.S., China hydro-pact

BY TONY WALKER IN PEKING

U.S. and Chinese officials signed an agreement at the weekend which opens the way for large-scale U.S. assistance in the development of China's hydropower industry.

Under the technical co-operation agreement, U.S. hydropower experts will advise on the construction of a number of hydro-electric sites. These include the Three Gorges project on the Yangtze River and the Hongshui River scheme in Guangxi Province.

The U.S. delegation, led by Mr. S. David Freeman, chairman of the Tennessee Valley Authority, has been visiting China for the past few weeks inspecting hydro-power sites.

The co-operation agreement follows the visit to China last August by Mr. Walter Mondale, U.S. vice-President, Mr. Mondale

signed a protocol with the Chinese under which America agreed to assist in the development of China's under-utilised hydro-electric potential.

Mr. Mondale also notified the Chinese that America was prepared to provide up to \$2bn in bank loans for approved projects.

It was premature to suggest that China would use these funds to develop hydro-electric projects, the official said. The Exim Bank had not yet cleared formalities which would allow it to arrange finance for any projects. Bank officials would visit China soon to discuss such arrangements.

Among the American utilities party to the agreement is the Denver Power Authority. The U.S. Army Corps of Engineers is also expected to provide technical expertise.

BUSINESSMAN'S DIARY

UK TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Mar. 17-21	Brewer '80—International Brewing, Bottling and Allied Trades Exhibition (021-705 6707)	NEC, Birmingham
Mar. 17-21	International Packaging Exhibition—FAKEX (021-705 6707)	NEC, Birmingham
Mar. 23-28	London Fashion Exhibition (01-385 1200)	Olympia
Mar. 23-28	Viewdata '80 Exhibition (0895 38262)	Wembley Conference Centre
Mar. 28—Apr. 8	Birmingham Motor Show (0602 51262)	Bingley Hall, Birmingham
Mar. 30—Apr. 1	British International Footwear Fair (01-437 6734)	NEC, Birmingham
Mar. 30—Apr. 2	GLASSEX '80 Glass and Technology Exhibition (01-553 4886)	NEC, Birmingham
Apr. 2-5	National Boys and Girls Exhibition (0583 630361)	Alexandra Palace
Apr. 8-10	Educational Equipment Exhibition (01-247 9326)	Harrogate
Apr. 15-19	Optical Home Exhibition (0727 312550)	City Hall, Hull
Apr. 19-21	Optifair '80 (01-405 8101)	Earls Court
Apr. 21-25	International Fire, Security and Safety Exhibition—IFSSSEC (01-388 7661)	Olympia
Apr. 22—May 2	International Machine Tool Exhibition—MACH 80 (01-402 6671)	NEC, Birmingham
Apr. 28	International Food and Wine Exhibition (06284)	Exhibition Centre, Leeds
Apr. 28—May 1	Audio Visual Exhibition (01-688 7788)	Wembley Conference Centre
May 2-5	Spring Motor Cycle Show (04386 74867)	Bingley Hall, Birmingham
May 2-5	Boat Show (0272 657783)	Exhibition Centre, Bristol
May 3-5	National Collectors Exhibition (01-629 4917)	Kensington Town Hall

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Current	Title	Venue
Current	World Photographic Exhibition—WORLD PHOTO (021-705 6707) (until March 21)	Singapore
Current	Middle East Business Equipment Show (01-486 1951) (until March 20)	Bahrain
Mar. 21-24	International Seasonal Leathergoods—SLEPEL Confectionery, Chocolate and Biscuits (INTERSEUC) (01-439 3964)	Florence
Mar. 23-31	Spring Fair (01-935 8200)	Paris
Mar. 27—Mar. 31	Machine Tool Exhibition—METAV (01-409 0956)	Düsseldorf
Mar. 27—Apr. 5	British Aviation Equipment Exhbn. (01-215 7877)	Shanghai
Apr. 7-10	World Fabric Fair (0582 466611)	Geneva
Apr. 13-15	MODEXPO '80: International Ladies Fashion Fair	Zurich
Apr. 15-19	Transport—Expo '80 (01-493 3964)	Paris
Apr. 16-24	Hanover Fair (01-651 2191)	Hanover
Apr. 21-25	World Tobacco Exhibition (0737 68611)	Nice
Apr. 21-26	Scientific and Measurement Apparatus Exhibition (INSTRUMA) (01-235 5422)	Brussels
Apr. 24-28	Pertumery and Cosmetics Exhibition COSMOPROF	Bologna
Apr. 29—May 2	Biochemical and Instrumental Analysis Exhibition (ANALYTICA) (01-486 1951)	Munich
May 6-8	Compe Europe Exhibition (01-261 6000)	Brussels

BUSINESS AND MANAGEMENT CONFERENCES

Date	Title	Venue
Mar. 17-21	Brunel Institute: The Effective Organisation (0885 86461)	Uxbridge
Mar. 19	LCCI: Industrial Investment in Tunisia (01-248 4444)	Cannon Street, EC4
Mar. 19-20	CCC: Foreign Currency Assets and Liabilities (01-222 6562)	Royal Lancaster Hotel, W2
Mar. 19-21	Gower Conferences: International Insurance Conference (01-242 9485)	Amsterdam
Mar. 20	BACIE: The Impact of Microelectronics on Industry and Commerce (01-636 5351)	Connaught Hall, WC1
Mar. 24-25	FT Conference: Business Premises and Profitability (01-236 4382)	Hilton Hotel, W1
Mar. 24-25	Law and Business Inc: New Techniques in Acquisitions of U.S. Companies (01-267 4468)	Portman Hotel, W1
Mar. 24-28	Keppner-Iregoe: Decision Making for Senior Executives (0835 38083)	Whately Hall Hotel, Banbury
Mar. 25	Institute of Directors annual convention: Prosperity or Poverty?—the last chance for choice (01-339 1233)	Royal Albert Hall
Mar. 26	Henley School for Forecasting: Costs and Price Forecasts to 1985 (01-333 9661)	London Press Centre
Mar. 26-27	Silly Temporal-Charles Simon: Control of Toxic Substances (01-985 1791)	Piccadilly Hotel, W1
Mar. 26-28	Frank Jeffkins School of Public Relations: Planned Press Relations (01-567 2911)	Connaught Rooms, WC2

Financial Times Conferences

European Offshore Conference

June 18 & 19, 1980 — London

The Financial Times will be following up its successful conferences on North Sea Oil with a further examination of the latest developments with special emphasis on the role of the UK and Norway. Aspects of the exploration, production and potential of oil and gas resources in the North Sea will be studied and the implications of the UK and Norwegian work for Europe and world energy problems will be examined.

The Secretary of State for Energy, the Rt. Hon. David Howell MP will be a key note speaker alongside a spokesman from the Norwegian Ministry.

The New Sri Lanka — Opportunities for Business

September 4 & 5, 1980 — Colombo

The Financial Times has decided that the timing for a conference to examine the official promotional activities for the economic development of Sri Lanka is opportune. The conference will aim to examine the business opportunities and incentives offered in those areas of significance to the general economic development of the country. The conference also will present to Sri Lankan businessmen and officials in the public sector, the opportunities offered for strengthening development through overseas investment and co-operation.

This conference will offer opportunities for businessmen not only to appreciate a wide ranging international view of the Sri Lankan situation but also to meet up with business colleagues and to take advantage of the opportunities to visit areas of economic development in the country.

All enquiries should be addressed to:

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INSURANCE

Growth of private medical cover

BY OUR INSURANCE CORRESPONDENT

THE NUMBER of people insured under private medical schemes (and those offered by British United Provident Association, Private Patients' Plan and Western Provident Association, which comprise about 98 per cent of the market) is growing again after a downturn in the last decade.

The number of subscribers is now about 1.5m, and since most of them have wives and children insured the number of people who enjoy the benefit of private medical insurance must be of the order of 4m-5m.

The majority, about 80 per cent of the total, are insured through group schemes arranged by employers. Financial arrangements vary, but it is quite common for the employer to pay premium for the employee's cover, leaving the employee to find the money to insure his family.

But in the final analysis the question of who pays is academic, for if the employer pays, the premium is regarded as part of the employee's income and aggregated with the rest of his income for tax purposes. And there is no tax relief obtainable on private medical insurance premiums any more than there is on disability or permanent health premiums.

But when the claim has to be made, subject to adequacy of the financial limits of the particular scheme, the claimant gets his bills paid in full: there is no tax bite.

Claims are met on an indemnity basis: if, for example, the surgeon's fee is £250, while the financial limit of the policy is £300, then £250 is all that is payable—the claimant cannot pocket the other £50.

From the subscriber's point of view, membership of a group scheme enables him to get his cover at a reduced premium. Indeed, small premium discounts are given by the three main associations for group membership, irrespective of their being fellow employees.

But still larger discounts are available for employee schemes — partly to reflect the saving in administrative cost, partly to reflect the reduction in selection against the associations by having a spread of averagely healthy members.

For the individual buyer, for the member of a small group, medical history normally forms part of the information that the associations require. But where a medium or larger group is to be covered, individual medical histories are not of underwriting significance.

For the individual buyer the three main associations offer three scales of benefit — reflected in three scales of premium. But when one turns to group cover, BUPA and Western Provident cut the options to two: their wider cover is related to the London Teaching Hospital scale, their narrower cover to the Provincial Teaching Hospital scale — though in addition BUPA will meet Nuffield nursing home costs if these are higher.

A week in a Nuffield nursing home currently costs about £350 (this is just for the room—drugs, medicines and so on are extra) while a week in a London Teaching Hospital can be as much as £550.

Age is a premium factor: broadly speaking, as in life or disability insurance, the older the person insured, the more he or she pays. Different schemes postulate different age rating groups: Western Provident charges the same for all group members up to 50, and then goes age-related, while BUPA's Bulk Protection Scheme has only two age groups, with 65 as the dividing line.

Reflecting modern business needs, the associations provide cover abroad to the same level as in the UK, for both business and pleasure trips, as long as these are of short duration and do not entail permanent residence overseas.

This week in Parliament

TODAY

COMMONS—Debate on Government motion calling for boycott of the Moscow Olympic Games.

LORDS—Competition Bill, third reading. Motion to Approve Prevention of Terrorism (Temporary Provisions) Act 1976 (Continuance) Order 1980. British Aerospace Bill, committee stage. Debate on effective machinery for auditing the second stage of the road planning process.

SELECT COMMITTEE—Home Affairs. Subject: The law relating to public order, processions and public meetings. Witnesses: National Council for Civil Liberties (Room 8, 4.30).

TOMORROW
COMMONS—Social Security Bill, remaining stages.

LORDS—Reserve Forces Bill (consolidation measure). Consideration of Commons amendments. Consolidated Fund (No. 2) Bill, all stages. British Aerospace Bill, committee stage. Motion to approve Southern Rhodesia (Constitution of Zimbabwe) (Elections and Appointments) (Amendment) Order 1980. National Health Service (Invalid Direction) Bill, second reading. Companies Bill, consideration of Commons amendments.

WEDNESDAY
COMMONS—Social Security Bill, completion of remaining stages. New Hebrides Bill,

remaining stages.
LORDS—Debate on co-operation between the National Health Service and the independent medical services during the past 30 years. Debate on the need to conserve energy. Debate on the closing of small village schools.

SELECT COMMITTEES—Education, Science and Arts. Subject: The funding and organisation of courses in higher education. Witnesses: TUC (Room 6, 9.30 am).

Scottish Affairs. Subject: Co-operation and overlap among the agencies etc., responsible for attracting inward investment to Scotland. Witnesses: Department of Industry, Foreign and Commonwealth Office (Room 12, 10.30 am).

Welsh Affairs. Subject: The role of the Welsh Office, and associated bodies in developing employment opportunities in Wales. Witnesses: Sir Hywel Evans, Permanent Secretary, Welsh Office, and other officials. (Room 8, 10.30 am and Room 6, 4.15 pm).

Foreign Affairs. Subject: The consequences of Soviet expansion for British foreign policy. The Soviet background. Witnesses: Dr. R. Conquest and Professor J. Brickson (Room 15, 10.45 am).

Industry and Trade. Subject: Import and Export Trade. Witnesses: CBI. (Room 16, 10.45 am). Public Accounts. Subject: Assistance to industry schemes, colleges of

education. Witnesses: Northern Ireland Department of Commerce. Northern Ireland Department of Education. (Room 16, 4 pm). Social Services. Subject: Examination of proposals in Rayner study on payment of benefit and sub-post offices. Witnesses: Sir William Barlow, chairman of the Post Office, and other officials. (Room 15, 4.30 pm).

THURSDAY
COMMONS—Debate on EEC documents relating to the Common Agricultural Policy and the Community Budget.

LORDS—County of Kent Bill, second reading. National Health Service (Invalid Direction) Bill, remaining stages. Debate on Liberal motion to disapprove the Immigration Rules.

SELECT COMMITTEES—Agriculture. Subject: Economic, social and health implications for the UK of the Common Agricultural Policy on milk and dairy products. Witnesses: British Multiple Retailers Association; National Food and Drink Federation; Voluntary Groups Association. (Room 16, 11 am).

Home Affairs. Sub-committee on Race Relations and Immigration. Subject: Race Relations and the 'Sus' law. Witnesses: the Home Office. (Room 15, 4.30 pm).

FRIDAY
COMMONS—Private Members' motions.

Budget aid to lower - paid urged

BY DAVID MARSH

THE GOVERNMENT should assist below-average earners by cutting the tax burden on the lower-paid in the Budget, according to the National Consumer Council and the Low Pay Unit.

The Consumer Council's pre-Budget recommendations call for a package costing £2.2bn, to be spent principally on raising personal tax allowances, child benefits, pensions and maternity grants.

The Low Pay Unit says the tax burden of the lower-paid has increased despite last year's "tax-cutting Budget". It suggests an extension of the

band of income taxed at a reduced rate and increased child benefits. Together, these measures would cost £2bn.

The Consumer Council calls for increases in personal allowances to £1,500 for single people and £2,500 for married couples.

This would represent an increase of 10 per cent above that needed to provide for inflation. It would free well over 500,000 lower-paid workers from income tax as well as helping taxpayers generally.

Child benefits should be raised from £4 to £5 for married

couples and from £6.50 to £10 for single-parent families.

The council says the measures could be financed partly by lower EEC contributions, by a higher tax taken from North Sea oil and by a "windfall" tax on bank profits.

The Low Pay Unit says extending the income band charged at the lower 25 per cent rate from £750 a year to £2,000 would reduce the tax bill of the average family by £1.20 a week.

The unit also recommends a rise of £1.75 a week in child benefit.

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Also has offices in Dublin, Amsterdam, Paris, Cologne, Stuttgart, Milan, Copenhagen, Madrid, New York, Chicago, Los Angeles, Houston, Cleveland, Santa Clara, Boston, Toronto, Sydney and Tokyo.

Paintmakers forecast 30% price rises

BY SUE CAMERON, CHEMICALS CORRESPONDENT

PRICE rises of about 30 per cent this year for industrial paints and coatings are forecast by the Paintmakers' Association. This follows an average increase of 29.8 per cent last year.

The association said the rises reflected UK paintmakers' efforts to recover "very severe" increases in the cost of raw materials. But it warned these attempts were not proving wholly successful.

Raw materials account for about 80 per cent of the production costs of industrial coatings, a sector which includes car paints, can lacquers, wood finish and powder coatings. Last year the cost of white spirit and xylol rose 33.5 per cent and 38.1 per cent respectively.

Contract prices for asphalt, the oil-based feedstock which is vital to the petrochemicals industry, rose 47 per cent in the seven months to last January.

"There is no question that such increases so far back in the raw materials chain will pose severe problems for the paint industry during 1980," the association said.

It said the cost of some non

oil-based raw materials used in the production of industrial paints scarcely increased last year, yet the association's cost index of all commodity raw materials had climbed by more than 17 per cent in the past nine months. This figure took "no account of sharper increases in distribution, labour and packaging costs."

Producers of decorative paints, which account for 54 per cent of the paints industry, had been even less successful than industrial coatings manufacturers in raising their prices to adequate levels. Their prices had risen 15.2 per cent in 1979 compared to an average rise of 31 per cent for the industry as a whole.

The Paintmakers' Association said industrial paint producers had experienced difficulties in maintaining volume sales last year partly because of the impact of "low U.S. chemical prices on import penetration."

Crown Paints will build a £700,000 extension to its factory in Halesworth, Northamptonshire, to increase its output of specialist protective coatings.

Fees will raise house costs, builders warn

BY MICHAEL CASSELL

THE Government's proposals to charge fees for building inspections and the approval of plans will raise house prices and increase local authority bureaucracy, according to the House-Builders Federation.

Mr. Ronald King, president of the federation, calculated that the fees, proposed in the current Building (Prescribed Fees) Regulation 1980 and presented to Parliament last week, could add £160 to the cost of a new £25,000 house and said they would discriminate against private house builders.

He suggested the system would mean more local authority monitoring staff.

The construction industry appears united in opposition to the Government's fees proposals and Mr. King's statement forms part of a campaign which is expected to gather momentum.

On Saturday, Mr. John Allen, president of the National Federation of Building Trades Employers, echoed the theme of increased bureaucracy when he predicted disputes between builders and authorities over the assessment of that part of the building works which attracted fees.

Some authorities, he said, were already preparing to hire more staff or engage consultants to check the validity of fees.

Mr. Allen told a federation meeting in Blackpool that while the industry accepted the need for policing of building regulations, the Government should bear the costs, as in the case of weights and measures activities and food and factory inspectors.

"This proposal looks like being, in principle and in practice, a costly expedient. We want the issue debated urgently in Parliament and the introduction of the scheme delayed while the implications are thought through more carefully."

Lewisham road plan approved

By Robin Pauley

A £12m SCHEME to improve roads and relieve traffic congestion in the London borough of Lewisham has been approved in principle by Greater London Council's south area planning committee.

Lewisham's problems are caused by two main roads meeting at the heart of its shopping centre. The plan provides for a by-pass and the conversion of part of the main shopping street into a pedestrian precinct.

Import control strategy rejected by Healey

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

PROPOSALS FOR a general strategy of import controls were strongly rejected by Mr. Denis Healey, Shadow Chancellor, in a weekend speech on domestic and international economic policy.

In the Lady Morgan Memorial Lecture in Cardiff on Saturday, Mr. Healey attacked both the Government's concentration on monetary control and the protectionist route (favoured, though he did not say so, by many on the Labour Left).

Instead Mr. Healey argued that Labour should be loyal to its international traditions, learning from the experience of successful socialist parties on the Continent and accepting the limitations on national freedom of action resulting from any attempt to reach international agreement on the many problems created by the oil crisis.

After noting the case for selective controls for particular sectors under temporary threat, he said: "To rely on general import controls to make industry more competitive is trying to cure the symptom rather than the disease."

Even if general import controls could be set up without

retaliation, "those who advocate them admit they would not produce an improvement in our industrial performance without a strict pay policy and falling Public Sector Borrowing Requirement."

Mr. Healey said the real question was "how to persuade the world to meet the increase in oil prices without beggar-my-neighbour deflation and how to use the benefits of North Sea oil to make British goods more competitive in a better-organised world economy."

Guarantees

He urged the need for agreement between at least some oil-producing countries and consumers in which the latter would get guarantees of output over a period of years, in return for the OPEC countries getting guarantees of a satisfactory price for oil.

"Britain should take the lead in persuading the major industrial countries to develop a programme of concerted action to achieve greater convergence in their economic performance, as the Labour Government did successfully at the Bonn summit in 1978."

Domestically, Mr. Healey said in view of the high level of savings and the low level of capacity use, public-sector borrowing should be much bigger and monetary growth much higher than the Government is planning.

It should be prepared to intervene more actively in the foreign exchange markets, at the price of seeing the money supply rise beyond its present target.

Philip Rawstone writes: Unless import controls were introduced on manufactured goods, Britain's textile mills, car and engineering factories would become "museum pieces."

Mr. Ron Hayward, Labour Party general secretary, said yesterday.

Such short-term measures should be used as a framework for developing a successful industrial strategy, he told the party's north-west regional council at Blackpool. Industrial regeneration required new public enterprises, greater investment, and expanded training schemes, "but none of these measures will work unless, first and foremost, we stop the flood of imports."

Car output faces five-year fall

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

THE NUMBER of vehicles designed and produced in Britain may fall from 1,071 last year to between 700,000 and 800,000 by 1985, say stockbrokers Phillips and Drew.

The 1985 level depends on BL's recovery and whether it can regain a 25 per cent share of the new car market.

Some decline in car production seems inevitable as export markets become closed to UK-built cars, the brokers say in their latest Motor Review.

Output will be hit as Vauxhall and Talbot UK replaces British-built cars such as the Avenger and Chevette with cars

imported in kits.

Production of cars assembled from kits may rise from about 80,000 in 1979 (mainly the Cavalier and Alpine) to 325,000 by 1985. As well as the Talbot and Vauxhall change to this method, production of kit-assembled cars will be boosted by the BL Honda joint vehicle, the Bountie.

Phillips and Drew say the impact of these changes on the UK motor component industry depends on the nature of the product.

"Those manufacturers making components normally incorporated in major assemblies—

engines, transmissions—which are imported in kits used to assemble cars, will obviously be harder hit than those making parts which assemblers would be likely to buy in the UK."

Items in the last category include seats and interior trim.

"It seems apparent that groups like Lucas, Associated Engineering and Automotive Products fall into the former category, hence their push into Europe and other overseas areas," the brokers say.

BP calls for oil tax cuts

BY RAY DAFTER, ENERGY EDITOR

BRITISH PETROLEUM, which last week reported after-tax profits of £1.6bn for 1979, says the Government may have to cut tax levels to encourage oil and gas production in the North Sea.

The Government is known to be reviewing its offshore oil tax regime. But if there are to be any changes—and they could be announced in the Budget speech—the effect will be higher, rather than lower taxes.

BP, which made much of its profit in the North Sea, says in a paper that the Government takes up to 83p in the pound of net revenue from offshore operations. The money is raised as royalty (12.5p), Petroleum Revenue Tax (up to 52.5p) and Corporation Tax (15p).

"North Sea Fiscal Regime," BP Briefing Paper; BP, Room SW 02-71, Britannic House, Moor Lane, London EC2Y 9BU.

Airways in TriStar campaign

BRITISH AIRWAYS staff worldwide are being encouraged by management to "buy a TriStar" by beating their revenue targets for 1980-81.

The objective is to exceed the basic revenue target of £1.9bn sales in 1980-81 by 1 per cent, or £19m, enough to enable the airline to buy another Lockheed TriStar airliner.

The line has 17 TriStars delivered and 12 on order. The price is about £19m each.

Highland saving

INCREASED CHARGES planned at the Scottish Highlands and Islands aerodromes run by the Civil Aviation Authority will not be as big as expected as a result of a Government subsidy of £2.5m a year for 1980-81.

Rolling up

THE NUMBER of commercial vehicles crossing the Channel on roll-on, roll-off ferries increased by 15 per cent in the third quarter of 1979. In the first nine months of that year traffic was up by 17 per cent.

Food fear

RISING DEMAND for "gasohol" may worsen the Third World food shortage, says a report by the Worldwatch Institute in Washington.

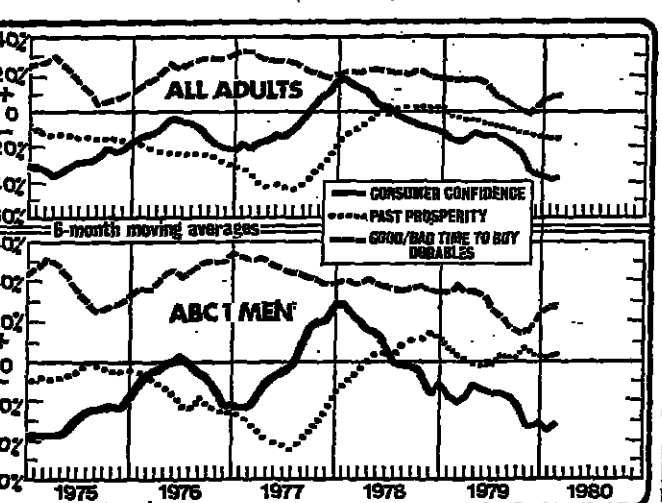
Newman costs

TWO DAYS have been set aside in the High Court this week to decide who pays the costs, thought to be between £500,000 and £750,000, of the case of Prudential Assurance v. Newman Industries and others. The hearing today may deal with terms of an inquiry into damages from Mr. Alan Bartlett, Newman's chairman, Mr. John Loughton, former vice-chairman, and Thomas Poole and Gladstone China. Mr. Justice Vinelott said in February that Mr. Bartlett and Mr. Loughton used "trickery and deceit" to ensure takeover by Newman of assets and liabilities of TPG.

FT survey of consumer confidence

Rising prices: more blame Government

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT



OPPOSITION to any increase in duty on cigarettes or drink in next week's Budget is a major feature in the latest FT Survey of Consumer Confidence published today.

About 48 per cent of the 1,000 consumers surveyed were against a duty increase on either cigarettes or alcohol.

Almost a third of consumers surveyed did favour a duty increase, however, with the balance not expressing an opinion. Of those wanting an increase, about 38 per cent felt duty on tobacco should be increased, while 35 per cent wanted an increase in drink duty.

Analysis of the survey shows men and women from the ABC1 social groups—professional and executive workers—were more in favour of duty increases than those in the C2DE social group (manual workers). But women in both social sub-groups were more likely than men to want a duty increase.

The results from the survey are broadly in line with the attitude of consumers before the 1979 Budget, although slightly more consumers in 1979—about 51 per cent—were against any increase in duty.

The survey also shows that the fall in confidence since the Conservatives came to power has at last been halted. The monthly index of confidence has fallen steadily from plus 9 per cent in May last year to minus 46 per cent last month—the lowest figure in the ten-year history of the survey.

This month the index has risen by 14 percentage points to reach minus 32 per cent. About 13 per cent of the sample expected conditions to improve, while 45 per cent expected them to worsen.

The improvement in the index—even though it is still at a historically low level—was due to fewer consumers expecting conditions to worsen rather than any real increase in confidence. But this is the first real sign of a change in the mood of consumers since last summer.

The main reason for pessimism given by consumers was rising prices, cited by 41 per cent of pessimists. This was slightly fewer than last month. But

there has been a rise from 32 to 30 per cent in consumers blaming the Government's economic policies for their pessimism.

There also appears to have been a change in mood about the effects of industrial disputes such as the steel strike. Pessimistic consumers were less concerned about strikes as a reason for pessimism, while optimistic consumers increasingly saw the limited effect of strikes as a reason for their optimism.

But the main reason for optimism given by consumers was still the nebulous hope that "things must improve."

The parts of the survey showing how people felt in relation to a year ago also revealed an improvement in the perception of past prosperity.

About 23 per cent of the survey felt better off than a year ago, while 42 per cent felt worse off—giving an index of minus 19 per cent. This was five points better than last month's index of minus 24 per cent.

The changes in the past prosperity and future confidence index have had little effect on the "time to buy" part of the survey, which is still at an unusually high level. About 41 per cent felt that now was a good time to buy large consumer durables, while 34 per cent felt it was a bad time.

This gave an index of plus 7 per cent, compared to plus 8 per cent last month.

This level of consumer willingness to buy may be due to large fears of higher prices later in the year, as well as the fact that large pay awards have not yet been eroded in real terms by rising prices.

The survey indicates that consumers still expect unemployment to continue to rise. About 51 per cent felt unemployment would increase, while only 10 per cent expected it to fall—giving an index of plus 41 per cent. This was slightly less than last month's record 44 per cent but is still a historically high level.

The Financial Times Survey of Consumer Confidence was carried out between February 28 and March 5 by the British Market Research Bureau. A sample of 1,034 adults was interviewed.

Foundrymen may review 1979 hours agreement

BY PHILIP BASSETT, LABOUR STAFF

PRESSURE TO prematurely reopen negotiations on a shorter working week agreement will be exerted next month at the annual conference of the Amalgamated Union of Engineering Workers' foundry section.

The agreement ended last year's national engineering industry dispute.

The settlement, particularly the provision to reduce the industry's working week in 1981 by one hour to 39 hours, was claimed by union leaders in the industry to be an advance.

But motions before the foundry section conference are highly critical of it. The foundry section was one of the unions which was party to the deal.

One motion objects to the settlement being described by the unions as a "victory" rather than as a "failure," or, at best, a "hollow victory."

It objects to the Confederation of Shipbuilding and Engineering Unions, failure to achieve many items of the original claim "for which we were on strike at considerable loss to our income and thus hardship to our families."

Another motion calls for a ballot of the CSEU's unions before industrial action is taken.

Some district committees of the 59,000-strong foundry section are sharply critical of the

reduction in working hours. Two "deplorable" progress made on the issue so far and "insist that the struggle be resumed in 1980."

Another motion urges the section's executive to press for renegotiation of the agreement to seek "the immediate implementation of the 35-hour week."

The agreement, made last October, is supposed to protect engineering employers against further claims for shorter hours until 1982.

Motions before the Blackpool conference will also set up preliminary pay targets. The main claim will be set by the CSEU, largely on the basis of the claim by the main engineering section of the AUEW.

But foundry section motions are a clear indication of some CSEU members' expectations. The highest target is a 37 per cent national minimum rate increase. This calls for the skilled workers' minimum rate of £73 per week—set under the October deal—to be raised to £100.

Minimum rates in the industry apply for 10.5 hours overtime and premium payments but are topped up by local deals.

Another pay motion calls for the ending of the minimum rate system so that all wages are negotiated at plant level.

Second union joins councils pay row

BY OUR LABOUR STAFF

THE NATIONAL Union of Public Employees will instruct its white-collar local authority members to join industrial action by National and Local Government Officers' Association members over a pay comparability offer.

NUPE's executive decided on Saturday to follow NALGO's lead. It is instructing members to ban overtime, to work to rule and to withdraw co-operation in councils. This will support NALGO's efforts to stop all work on rate demands and on comparability offers.

NUPE claims about 25,000 members, mainly in supervisory grades, among the administrative, professional, technical and clerical staff involved.

Mr. Ron Keating, assistant general secretary, said yesterday that NUPE members would join NALGO members in taking the same industrial action and withdrawing co-operation.

Some NUPE members responded swiftly to the executive's instruction. Computer staff employed by Mid-Glamorgan county council yesterday halted computer work on rate demands. This authority is the largest in Wales and among its staff in the appropriate grades NUPE has a membership about equal to NALGO's.

NALGO's strike operations committee meets this afternoon to consider balloting its air-traffic control members on taking disruptive industrial action during Easter at municipal airports. These include Luton, which handles many package holiday flights.

The committee will also consider the requests from groups in the union, including rent-collectors, who wish to take part in the action, and will examine reports of local negotiations with individual councils on the comparability offer.

Local authority employers are due to meet today to consider both the unions' programme of industrial action and their own response to the unions' rejection of their 6.12 per cent comparability offer. The unions are claiming 10.22 per cent.

The employers' side has been collecting since last week the responses of individual authorities to the unions' rejection of the offer. The responses will be considered today at the employers' meeting, to determine whether a fresh offer should be made.

The employers are considering calling a full meeting of the Local Authorities' Conditions of Service Advisory Board to consider the dispute.

Whitehall unions start pay talks

By Our Labour Staff

NEGOTIATORS for the two largest Civil Service unions will begin talks today on pay offers being put to them by the Civil Service Department following the Government's announcement of a cash limit and cut in manpower which together provide for pay increases of 1½ per cent.

Some offers were sent out on Friday after the cash limit was announced, but details of those drawn up for the Civil and Public Services' Association, the main clerical union, and the Society of Civil and Public Servants, representing administrative and executive grades, will be revealed today.

Both unions are likely to be able to put the offers to their respective executives later this week. The Inland Revenue Staff Federation, which customarily follows the two large unions on pay, will examine their offers this week before considering pay at its own executive, probably next week.

The third largest union, the Institution of Professional Civil Servants, is unlikely to receive an offer soon since the Pay Research Unit comparability reports, on which Civil Service pay is determined for its grades, were delivered late.

All the offers are likely to include an attempt by the Civil Service Department to pay the awards in stages in order to try to bridge the gap between the 16½ per cent and the average rises of about 18 per cent being shown as due by the Pay Research Unit.

Militant groups, such as the SCPS will approach the negotiations determined to resist staging, but there is some dispute among the unions as to how the maximum obtainable benefits from staging could be achieved.

Union leaders will meet tomorrow to consider their response to the cash limit.

Scots bank staff claim 27.5% rise

By Nick Garnett, Labour Staff

A CLAIM for salary increases of 27.5 per cent has been submitted by the National Union of Bank Employees for staff in the Scottish clearers.

The claim, due for settlement at the beginning of next month, also includes a demand for a holiday bonus worth 1.25th of annual salary and a mechanism for protecting the value of the settlement against inflation.

Mr. David Paterson, the union's deputy general secretary, said the union does not want the new agreement to run for a fixed term. If the banks insist the union will want a threshold or indexation clause.

The claim is based on bank profits, the level of inflation and past cooperation from staff over new equipment. Mr. Paterson said.

The claim affects about 23,000 staff. The English clearers made a 17 per cent offer last week in response to claims ranging from 20 per cent to more than 30 per cent.

Power stewards back 18% deal

By Our Labour Staff

POWER WORKERS' shop stewards voted at the weekend to accept a pay offer of 17.19 per cent which has already been agreed to by official leaders of the 36,000 electricity supply manual workers.

The National Joint Shop Stewards' Committee, not officially recognised by either employers or unions, said it still intended to pursue outstanding items of the original claim such as shorter working week, more holidays, voluntary early retirement and official recognition of shop stewards to report back to a stewards' conference later this year.

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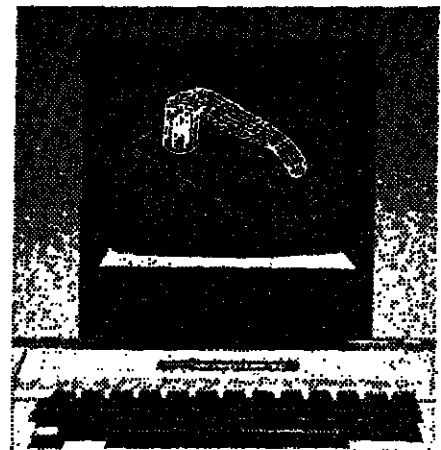
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Building and Civil Engineering



An £11m contract to build the first phase of a new district general hospital at Maidstone, Kent, has been awarded to John Mowlem by the South East Regional Health Authority. The development will be two miles west of the town centre

Water for a desert city

WORK HAS started on site on the new £11.3m water supply scheme for the town of Hail in Saudi Arabia.

The scheme, which will take about two years to complete, is being carried out for the Ministry of Agriculture and Water, Riyadh and was designed

by Sir Frederick Snow (International). The main contractor is the Sangyong Construction Company of South Korea. The purpose of the scheme is to supplement the town's existing water supply with up to 20,000 cubic metres of water per day initially with the capability of future extensions of up to

40,000 cubic metres per day.

The water will be obtained from new boreholes to be sunk at Hamimah, some 45 kilometres north of Hail and will be pumped first to a ground level tank and then via a 600 mm diameter ductile iron pipeline to a new reinforced concrete service reservoir in Hail.

Premium Garden site

WORK IS in hand on a 26,580 sq ft net shop, office and flat development at the corner of James Street and Long Acre in London's Covent Garden.

It is being carried out on behalf of Interland Estates, a subsidiary of Heron Corporation.

At a cost of £11m, facades

are being retained and the whole of one section refurbished. These buildings form part of an historically important terrace.

The scheme will provide a six-storey office development of 13,985 sq ft together with 11,225 sq ft net of shop/restaurant accommodation at basement and ground-floor levels.

Refinery expands

CONSTRUCTION ENGINEERS William Press and Son have been awarded combined contracts worth £1.5m by Pullman Kellogg for pipe and vessel erection associated with the resin upgrading project at the Mobil Oil Refinery in Coryton, Essex.

The work has been divided into three separate contracts. The first calls for the erection of fabricated pipe work and installation of pumps and filters for the effluent area from the units where residual oil is being upgraded. The biggest single section of the work is the second contract which provides for the fabrication and erection of further pipework, vessel and steelwork in the offsite new Flare Stock area.

But the most spectacular job is reserved for the third contract which calls for the erection of the 350 ft high, guy supported, flare stack in May this year.

Legion has HQ plans

ROYAL British Legion has appointed Bovis Construction to carry out a major reconstruction at the Legion's headquarters building, 48/49 Pall Mall, London.

The work involves the demolition of the rear of the building which is to be re-built and extended to provide additional accommodation. Thus all London-based Legion organisations will finally be housed in the same building.

An essential aspect of the scheme is the retention of the existing Pall Mall facade, behind which 39,000 sq ft (gross) of offices are to be created, together with a council chamber at basement level.

Reconstruction, now in progress, will take some 74 weeks to complete and the cost figure is thought to be around £11m. At Pall Mall, Bovis face several severe problems, including access limited to the rear of the site and the fact that the new Jubilee Line tunnel passes directly under the Legion's building.

Architect is Stanford Eatwell and Associates of Stansted Mountfitchet, Essex; structural engineers, Mitchell McFarlane and Partners; quantity surveyor Gordon Harris and Barton and mechanical engineering consultants, Ellis Mechanical Services.

Sports in Scotland

AT BLANTYRE, Cubitts (Scotland) is to build a £2.17m sports centre for Hamilton District Council.

Accommodation at the centre will include a 25-metre pool and training pool, a sports hall and ancillary hall, two squash courts, changing areas, sauna suite and solarium, cafeteria and bar lounge.

Designed with a steel frame and reinforced concrete floors, the elevations of the new building will be largely of brick. The contract includes provision of the car park and landscaping.

The sports centre has been designed by Hamilton DC director of architecture, E. D. W. Duncan, with Thorburn and Partners as structural consultants and Wallace, Whittle and Partners as consultant engineers for mechanical and electrical services.

On the Scottish coast at Saltcoats, the company (member of the Farnace Group) will build an amusement centre with office accommodation above for B. Kemp Consolidated Leisure. Architect for the £225,000 project is John H. Brackston Associates.

Mears wins Jersey job

WORK IN the upper harbour yacht marina in St Helier is to be carried out by Mears Contractors at a cost of £1.4m for the States of Jersey.

A low wall is to be built around the toe of the existing masonry wall of the upper harbour on the north, east and west sides. In some areas the wall will be of mass concrete placed on rock, but where the rock is low, sheet piles will be used.

On the south side of the upper harbour a blockwork wall windbreak with a top level of about 12.5 metres will be constructed while in the south wall of the yacht marina there is to be a concrete weir with two steel gates.

Mears will also be deepening the harbour by removing 60,000 cubic metres of material and in addition will position timber columns and mooring piles for the attachment of floating booms and pontoons. A sub-contractor will supply floating booms and pontoons, walkways, ramps, mooring devices and services.

Benghazi contract

ELECTRICAL and mechanical services for the new Faculty of Science complex at the University of Garinuis, Benghazi, are to be designed by G. A. Buckle and Partners, London consulting engineers.

They will also be responsible for preparation of tender documents, leading to multi-million pound contracts, which they will supervise.

Architects for the complex, comprising chemistry, biology, zoology, physics, mathematics and other buildings, are James Cabbitt and Partners, also of London. Buckle has been designing electrical and mechanical services for earlier phases of the university's development since 1966.

Chemicals plant

DESIGN, construction and complete project management of a self-contained formaldehyde plant with a production capacity of 30,000 tonnes per year is to be carried out by West's Process of Darlington. The plant is for the Chemical Supply Company at its Haverhill factory in Suffolk and represents a capital investment approaching £1.5m.

Construction starts next month and completion is for early 1981.

Comfort at the Opera

MANAGEMENT contract awards for a building to contain rehearsal and changing facilities at the rear of the Royal Opera House, Covent Garden, London, have gone to John Mowlem and Co., and work is under way.

This project forms the first phase of a major redevelopment of the whole area around the Opera House. When complete late next year, the new structure will provide practice studios and dressing accommodation for both the Royal Opera and the Royal Ballet Company, whose homes are at the Opera House.

The development will consist of an opera rehearsal studio; a chorus room with tiered seating for 120 people, two ballet studios, new stage door and telephone system, 13 dressing rooms for opera principals, dressing rooms for 150 singers, and others—new wardrobes, changing rooms and showers—and administrative offices.

The building has been designed by the GWM Partnership, consulting engineers are Scott Wilson Kirkpatrick and Partners and the quantity surveyors are Gardiner and Theobald.

Belgian ideas for Algeria

TRANSURB Consult, Brussels, has obtained a contract from Algerian Railways for the complete engineering design of the rail service for the future industrial zone of M'Sila.

The new railway line will be approximately 60 km long and will connect up with the existing Algiers-Constantine line. This contract is in addition to three other contracts in hand by Transurb Consult concerning the complete design of another railway link to the new industrial site at Jijel, study of the reorganisation of the rolling stock maintenance shops, and study of the reorganisation of the management computer system.

In partnership, Transurb Consult is also carrying out a reorganisation survey of Algerian Railways accountancy and finance systems.

Transurb Consult is the Belgian engineering company which groups operating companies — Belgian Railways and

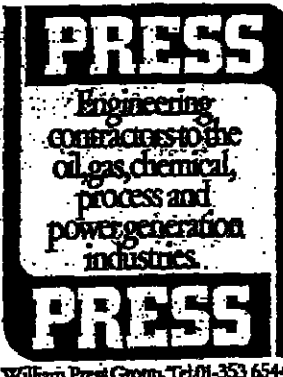
the Brussels Interborough Transport Company — and the principal Belgian design and engineering offices.

McAlpine homes in London

ANOTHER STAGE in the upgrading of Tolmers Square, London has been reached with the award to Sir Robert McAlpine and Sons of a £2.6m contract by the London Borough of Camden.

Sixty-nine dwellings, six shop units and a community centre are to be erected on a 5,000 square metre site. The heights of the structures will vary from 11 metres to 23 metres and the construction will largely consist of load bearing brick and block with timber and reinforced concrete floors.

Work starts at once with completion for late 1981. Architect is Rensom Howard Wood Levin Partnership and the consulting engineer Ove Arup and Partners.



Renovations by Wates

AGAINST THE trend Wates Special Works has won 22½m worth of orders.

At Edith Grove, Chelsea, 82 flats are to be modernised for the Guinness Trust under a £11m contract. The 5-storey blocks will have new services throughout. Windows overlooking heavily trafficked roads will be double glazed. Flats will be insulated to reduce heat loss and further savings are to be achieved by recovering roofs in low density concrete with a high thermal resistance.

Architect is Green, Lloyd and Adamson.

Modernisation of Wandsworth police station will cost £489,000. Work will be completed within 10 months.

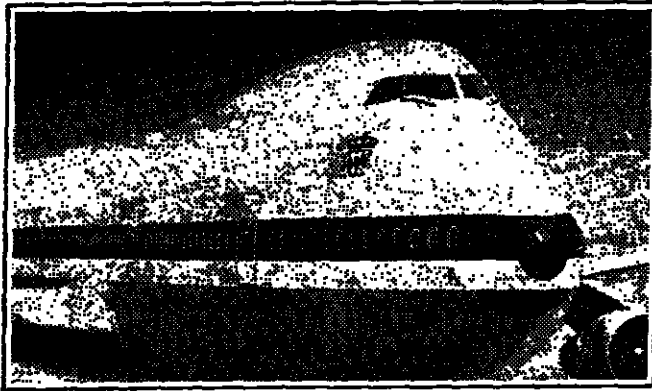
IN BRIEF

● Fitch has a contract to redesign 25,000 sq ft of a shopping centre in Shannon. Airports for Aer Rianta as part of the redevelopment of the duty-free shopping area at Shannon.

● A major order for Granges Aluminium profiled cladding, worth over £100,000, has been placed with RZ Aluminium Fabrications of Hull, for the cladding of the six new buildings currently under construction which will together make up the assembly plant for the new De Lorean luxury sports car to be built in Belfast. More than 12,000m square metres of "Monoclad" with Granges TRP 40-100 grey Metallack bonded to 30 mm polyisocyanurate insulation will have been used by the time the job is completed.

● Equipment for the continuous production of GRP translucent sheeting at six metres a minute has been sold by Laminated Profiles Development to Venezuela. The contract is with Deco-Glass Industrial, Y Commercial, CA, Venezuela, and is worth over £100,000. It includes the supply of process technology, plant design erection supervision and commissioning of a complete production unit at a site about 50 miles from Caracas.

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PSC Freyssinet will be officially inaugurated at the Commonwealth Institute on March 19th.



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Fiscal relief in business game

A SHINING example to the Chancellor of the Exchequer has just been set by the administrators of this year's UK national management championship, which began in January with an entry of 808 teams. The administrators, who play the role of Government in the computer-based contest, have rewarded the 202 teams which have won through to the second round with a 20 per cent cut in taxes.

This fiscal generosity, however, has been balanced by a worsening of the general economic conditions facing the surviving "paper" companies in their struggle for one of the 64 places in the third round, which starts in mid-April. Two further rounds will then reduce the entry to the four teams who will compete in London on July 23-24 for prizes of £2,000, £1,000, £750 and £500.

Players still in with a chance include the 1979 champion, Neil Tomkin of Rank Xerox, even though his company's initial entry of six teams has already been halved. Of companies which submitted a mass entry, ICI has the best record with ten teams still surviving out of the 18 who came to the starting line. But RHM Foods' three initial entries are all still in business.

The 808 teams which were knocked out in the opening round can retain a chance of financial reward by entering the subsidiary "Plate" competition organised by the National Management Game's sponsors—the Financial Times, ICL and the Institute of Chartered Accountants in England and Wales, in conjunction with the CBI and the Institute of Directors.

The Plate, which will also be decided in July, carries prizes of £750, £500, and £250 for the three teams who direct their "paper" consumer-durable businesses into the final. Entry lists for the subsidiary contest will be kept open by the administrators, Geoff Trewhinnar (NMG) Victoria House, Southampton Row, London WC1B 4FJ—Tel. 01-342 78061 until tomorrow, March 18.

Michael Dixon

The missing link in the engineer's armoury

Brian Houlden and Terry Hill argue that the Finniston Report overlooks the need for management acumen

A FEW years ago one of the top executives of a major multinational corporation moved from the position of financial controller of its substantial European activities to that of technical director. He was originally trained as an engineer.

His job change, and his earlier career path, exemplifies the sort of contribution by engineers to industry which the Finniston Report wishes to promote. It illustrates one form of the flexibility of engineers across the "engineering dimension."

The executive had originally graduated as an engineer, but his course included some management topics. He followed this with three years as an engineering officer in the defence forces, attended a one-year business school course in North America, and for three years worked with a leading international consultancy specialising in company structure and strategy issues. He then joined the finance function of this multinational. Over the next few years his performance was such that, even though he was not a qualified accountant, he was promoted, at a relatively young age, to the post of financial controller.

His example illustrates some general points. Most senior executives, whatever their prime function, have to have as much, if not more, understanding of business and management as of

their specialism. Engineers, in order to make a full corporate contribution, are no exception. In this case, the executive achieved this mix and earned his standing in the company, by a combination of formal education and experience blended together over a period of several years.

But it is not only engineers in senior management who need an understanding of business and some management ability. Both those in mid-career and raw graduates in junior posts will operate less effectively if their educational foundations exclude management subjects.

Yet the recommendations of the Finniston Report give scant attention to these management aspects of the education of engineers.

The report explains clearly the link between the success of the manufacturing sector and our future standard of living. It also shows how in recent years much of the UK manufacturing sector has been looking out to foreign competition because it has failed to make technological advances in its products and production processes. This has led to a loss of markets, low productivity, falling profit margins and shortages of resources for investment in new products and equipment. These failures are clearly demonstrated in the television, motor-cycle and machine tool industries as well as in many others.

The early part of the report focuses on what it calls the "engineering dimension." It puts forward the view that the widening of the engineering contribution is an important prerequisite for improvement in manufacturing industry. Certainly engineering must have a bigger impact on our manufacturing industry if these shortcomings are to be overcome, but will implementation of the proposals in the report cause sufficient change in the impact of engineering on industry? We think that they will not, because in its recommendations on education the report largely overlooks the management content of what it describes as the "engineering dimension."

Too late

While there are many examples of British companies falling behind in technical advance, there are also many cases of excessive focus on technological sophistication. This invariably leads to products arriving on the market too late, products which are so costly to produce that they yield inadequate profit margins, and products which are too prone to breakdowns and difficult to maintain.

A successful engineer in research, development or design therefore needs to have much more than a technical competence

in engineering itself. He needs to be able to relate his technical knowledge to an understanding of the customer's needs and to be able to estimate the total cost to the customer. He also has to have some understanding of how a product would be manufactured in practice. Thus, he requires not only a thorough training and experience in engineering, but also an understanding of certain areas of business (e.g. manufacturing management, marketing and accounting).

To achieve this, these "business" aspects need to be introduced early in his training; they need to be taught by management teachers who have experience of their subjects related to such engineering situations and they must occupy a significant part of the total training.

It may be that some of the enhanced courses at ten institutions which the report mentions do match the particular needs of engineers going into research, development and design. But what about the different types of engineers needed for other functions in industry?

Industry also particularly needs better people in production. To help achieve this, it requires graduate engineers of quality who wish to spend much of their careers in line production management. For such work an engineer has to know as much about management as engineering.

In parallel with his knowledge of engineering he has to be able to develop quickly a practical competence in the non-technical aspects of the job. The production manager controls the bulk of the fixed assets, current assets, direct costs and people employed. It is therefore essential that he understands these areas as thoroughly as he does the technology of the product and process.

In order to contribute he needs to be able to discuss issues intelligently with the support functions which exist in the company. He needs to be able to debate the alternatives and then play a decisive role in implementing and developing procedures and systems in the areas he controls. He needs to be able to do this with the same level of competence as he exercises in the technical arena.

Thus he needs to be able quickly to develop a practical competence in production scheduling and control, in industrial relations, particularly at the shop floor level, and in industrial engineering. He also needs an ability to develop proposals for new production processes and additional capacity, and hence to be able to interpret technical knowledge for accountants (which means being able to talk in their language). A further requirement is a good understanding of quality control.

A new BSc programme in

Manufacturing Polytechnic at North East London has been designed in close collaboration with staff of the UK operations of one of the world's leading volume car manufacturers. Slightly over half of the total programme is devoted to management rather than technical engineering subjects.

Similarly, paths can be traced for graduate engineers wishing to pursue the early part of their careers in marketing, personnel, purchasing and finance—their technical engineering training needs to be matched with a substantial training in management subjects specially chosen to relate to their career choices.

Dimension

The early part of the Finniston Report does focus on this broader mission, but it does not then match these "needs" with its recommendations. If the latter are implemented, the quality of school leavers studying engineering is likely to improve. As a result we will get better engineers in the technical sense. But this is not enough to secure the required impact of engineering across the whole "engineering dimension."

Engineering in the technical sense is largely scientific, in that problem can be described fairly precisely and quantification is relatively easy. On the

other hand business and management are concerned with art as science. Problems are dynamic and difficult to describe or quantify; they embrace human behaviour and financial resources, as well as technology. The mind of the engineer must be brought to understand and cope with these intangibles much earlier than at present. Otherwise his thinking becomes set in its ways, and career opportunities across the "engineering dimension" become closed to many.

Much serious thought needs to be given both by industry and those in schools of engineering and schools of business, about how to develop integrated flexible programmes. Such courses would have to offer enough optional subjects to allow different students wishing to pursue engineering careers, to choose the appropriate balance of engineering and management subjects.

This is a challenge that the Finniston Report fails adequately to expose. If it is not answered correctly, the better future for the people of the UK, at which the report aims, will not be achieved.

Brian Houlden is the Institute of Directors' Professor of Business Studies, and Terry Hill, the Senior Lecturer in Production/Operations Management, in the School of Industrial and Business Studies at the University of Warwick.

BOOK REVIEW

Guessing the odds for the future

BY PETER RIDDELL

PARTS of this book, "Britain through the 1980s," are rather like an extended version of one of those "what will it be like in 1997" articles so beloved of Sunday colour supplements a few years back. It lists 136 possible forecasts from a major world war to a rising birth rate; James Morrell's odds are put against each item and the reader is invited to estimate his own odds and to construct his own scenarios of possible events.

Life, as one of Damon Runyon's characters once remarked, is six to five against, and it is great fun trying to guess whether there is more or less than a 40 per cent chance of the "emphasis in political management shifting from economic to social factors"—whatever that might mean—or a 10 per cent chance of "war in space". All this will no doubt create many diverting hours but

whether the book is worth £85 amounts to a "strategic planning guide for businesses in the 1980s" is a different matter.

However, for all its absurdities the book is not entirely without merit or interest. It raises the important question of what type of guide to possible future developments is likely to be useful to the corporate planner or executive, and which is not. Strategic planning is enjoying something of a vogue at present, as the recent article on this page on Shell pointed out. There is obviously a legitimate role for a discussion of the range of possible influences on business decisions—including

not only potential economic developments but also political factors, such as legislation and the stability of particular countries.

Indeed the most interesting sections of the new book are those discussing the prospects for various industrial sectors. Reflecting on his own background as an economic forecaster working closely with industry, Mr. Morrell identifies a number of new industries for the 1980s, many of which will be concerned with the development of information systems and new sources of energy and raw material. There is, however, an obvious danger in trying to pick "winners" as tech-

nological changes are never quite as sweeping as the enthusiasts predict.

Such strategic planning exercises can help in providing thought about the impact both of technological change and of political and economic uncertainty. But this book goes into an area where there is much less scope for useful discussion.

It is full of assertions which either rest on tenuous foundations or have no meaning as statements. For example, Mr. Morrell concludes that "the world will reach its peak and the social forces at work in Britain today point towards the

reduction in size of work units and the steady erosion of the influence of unions." Or not as the case may be.

It is not clear what any manager is supposed to make of the suggestion that there will be further progress towards female equality. In itself this means nothing. The vacuity of such comments is only matched by the estimate that there is only a 2 per cent chance of a world war but a 50 per cent chance of a non-nuclear war on the scale of Korea or Vietnam somewhere in the world. Such speculation is of no practical value whatsoever to any manager apart from the trite

point-obvious to any reader of any newspaper—that there is considerable political uncertainty in the world.

It is also unclear at whom the book is aimed. Large multinationals already have their corporate and strategic planning departments, and further down the scale, it is hard to see what medium-sized companies could find useful in the more speculative social and political parts of the book. Should the senior executives of a marshallware manufacturer really waste their time worrying about whether they are properly organised to meet the opportunity (or threat) posed by, for example, the suggestion that "the UK will move in a conservative direction"? These executives should certainly be concerned with the impact of external influences on their business, but they should stick to ones which are identifiable and not just a vague mixture of the latest fashionable trends.

There is a proper role for the discussion of possible social and economic developments—though it should not be termed forecasting. Mr. Morrell should have confined himself to those areas of the economy and the industrial structure which he knows well and about which he knows plausibly, if somewhat ponderously, in this book.

Yet there is still something slightly sad about the growth of this type of strategy planning. The desire for forward projections and "scenarios" is in part a reflection of the decline of the entrepreneurial spirit and an associated desire to support any decision with the maximum amount of analysis, however specious. A recognition that the world is uncertain and that flexibility is uncertain is worth more than a whole library full of "scenarios."

Britain through the 1980s by James Morrell, Gower, £85.

Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

CONSTRUCTION

Quieter way to break new ground

WORKMEN AND public alike have not been enamoured with the offensive noise and discomforting vibrations emanating from conventional pneumatic drills. Now, some of the suffering may stop with the introduction of a new road breaker, all British in design and manufacture, promising to be easier on Anglo Saxon ears.

Called the Zitec 20, it is the first product to emerge from a radical new approach to construction tool design by CompAir Construction and Mining Tools Division, Cambridge, Cornwall (0992 714780). The company's latest concept—which they call Zitecology—aims to take advantage of the most up-to-date manufacturing methods and materials to achieve designs that lighten the health and safety burden on operators by fabricating machines which can be used for long periods without causing unnecessary fatigue.

According to filmed interviews conducted on building sites by the company, men who have used conventional road breakers for most of their lives in the construction industry report that the Zitec 20's performance is unrivalled.

This looks and even feels like an ordinary, deafening, bone-rattling breaker until it is switched on... then the differences are manifested in operator comfort and the amount of time he can spend using this tool against the exhausting exercise necessary with tools which do not boast the CompAir product's advantages.

To begin with, it weighs only 20 kg—yet will tackle any job previously requiring larger

pneumatic tools. The usual heavy forgings have been replaced with simple steel and/or cast iron components, allied with tough plastics, and extensive rationalisation has reduced the number of components by 50 per cent. Result is a streamlined, balanced breaker which is easy to handle and promises to set new standards in industry.

Trim it may be, but not at the expense of toughness. The plastics chosen for this model allow it to stand up to the roughest site conditions and are self-healing if accidentally pierced.

Traditionally the guts of the breaker, the cylinder, has been an integral part of the heavy steel forging which forms the main body, but with the new machine that casting has been replaced by a steel tube, bored, faced and drilled on a single machine. Cylinder is bonded into a polyurethane sleeve which slots into the outer casing of the breaker which is also made of the same tough material.

Embedding the cylinder in plastic results in the suppression of vibration and deadening of noise. The design has also enabled a long exhaust passage to be incorporated between the cylinder sleeve and outer casing—cutting down noise from explosive discharge of exhausted air.

The result is low noise level—84 dBA at seven metres and 92 dBA at one metre. Maintenance is simpler because there are only 28 components in the machine which can be easily serviced on site (one spanner only is used for dismantling) and even the piston can be changed in well under half an hour.

DEBORAH PICKERING

SAFETY & SECURITY

Explosion-proof drums

DRUMS designed to protect petroleum spirits, solvents and other low flash-point liquids from explosion, have been designed by Fire-Reliant, of Southampton, UK.

In 25, 50 and 210-litre sizes, they are each filled with Expolloy, an expanded aluminium alloy mesh, which protects the contents from many explosive hazards including impact, external heat, flash-back, auto and electrostatic ignition and drum penetration by anything from a hot splinter to an incendiary bullet.

Although it completely "fills" each drum, Expolloy takes up less than 1 per cent of the volume, weighs only about four ounces per gallon space and retains no more than 2 per cent of the liquid content. It will function efficiently right up to its melting point of 1,200 degrees Fahrenheit.

Fire-Reliant drums are constructed to BS 814 1974, a significantly higher standard than that adopted for the majority of industrial drums.

The surface finish involves four stoved coatings, the final coat being an easily identifiable yellow.

Each drum is labelled "Explosion Protected" and drums can be supplied with approved labels covering the requirements of the Highly Flammable Liquids Regulations or the Petroleum Consoleration Act.

Fire-Reliant, 106a, Upper Aughton Road, Southport Merseyside, PR8 5NJ. 0704 64617.

IN THE OFFICE

Linking many important tasks

HAVING CAUSED something of a stir by advertising its computers quite heavily on television, Wang (UK) has undoubtedly reaped the benefit at a recent follow up in a London hotel where more than 2,000 people attended a product presentation in several shifts over two days.

Since the company started in 1951 with calculators it has followed an end user approach and its most popular unit, the 2200 small business computer is now installed at an impressive 38,000 sites throughout the world. The company now claims to be number two in the supply of such equipment.

No brand new hardware was on show at the London meeting and a good deal of the emphasis was on integrated systems that could bring together business data processing, word processing and communications, welding all of a company's functions together with workstations and cable.

For some time Wang has offered its integrated information systems in which at one

office business computing and word processing can be operated as a whole.

Now the company is beginning to offer systems in the U.K.—already gaining a hold in a London hotel where more than 2,000 people attended a product presentation in several shifts over two days.

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For some time Wang has offered its integrated information systems in which at one

the utilisation of suitable Post Office lines for the concept of "electronic mail" to be invoked.

The company's system for this is called Mailway and it provides the management and control support for distributing documents electronically between the sites.

Information that is created on a Wang workstation is automatically routed to its destination in what might be called a complicated network, the operator using a menu and mailing directory. The directory is in essence an electronic address book which lists the names of those persons in an organisation for screen-based choice.

Once the distribution is selected, Mailway routes material without operator intervention. Dialling is obviated by means of an auto-call facility—only one or two buttons need be pressed.

As the company's promotional literature puts it: "It's as easy as licking a stamp."

Wang (UK) is at 211 Lower Richmond Road, Richmond, Surrey TW9 4LU (01 878 7821).

GEORGE CHARLISH

METALWORKING

Big bang joins tubes to plates

BECOMING generally accepted as an industrial technique is a form of explosive welding which can be used in the repair and manufacture of heat exchangers, developed and patented by IRD, the new technique, called IRDEX Welding, is the latest move in IRD's work in this area.

With explosive welding techniques used until now it has been necessary to provide an appreciable gap or "stand off" between the two parts to be welded and to use the explosive

to accelerate directly one component towards the other. In tube to tube-plate welding, the "stand-off" is annular and is typically half the wall thickness of the tube. In certain designs of heat exchanger this gap is a limiting factor in fixing tubes into tube-plates since it has to be produced either by thinning the tube wall or by enlarging the hole in the tube-plate.

The method developed by IRD involves the use of a specially designed tube insert which

allows explosive welding with "stand-off" distances down to 0.005 in (0.125 mm), even when thick-walled tubes are being used.

Furthermore, this method does not require a taper to be matched on the tubes or tube-plates.

One example of the use of this method is in the re-tubing of 12 high pressure feed water heaters for Castle Donington power station.

IRD, Fosseway, Newcastle-upon-Tyne. 0632 650481.

Cuts with laser and punches shapes

TRUMPF Machine Tools, which expects to sell some 240 numerically controlled machines for the removal of metal from sheet material during this year, has introduced a unit which combines laser cutting for complete shape forming, edge forming and so on, with punching for regular shaped holes.

The machine uses a Photon Sources mixed gas laser from the U.S. with a Trumpf optical system, resulting in a consistently produced cutting width of 0.2 to 0.4 mm, giving minimal waste and environmental contamination.

Suitable metals (not aluminium or copper) up to 6.4 mm thick can be cut and the cutting rate for 1 mm material is 4 metres/min for a fine edge,

or if a slightly more ragged edge is tolerable, 8 metres/min. The latter would be perfectly acceptable if, for example, welding were the next process. The advantage of the laser is that any shape can be cut without special tooling and by using appropriate programming. There are thus no tool replacement costs.

The method can also generate small radii, narrow webs, acute angles and large cut-outs that exceed the maximum punching diameter of the punching section—or those that would cause very high noise levels during production.

However, the punching unit would be brought into use where the need is for cut-outs of identical size and where the

quantity is high enough to justify the tooling costs and tool changing time.

Tool change is either performed semi-automatically with a cartridge which is directly inserted into the single tool adaptor, or automatically via pre-loaded cartridges which are stored in a multi-station magazine.

All the tools are clamped hydraulically into the rigid tool adaptor which is supported by an extra long hydrostatic ram bearing enabling standard punches to take off-centre loads to perform nibbling and forming operations such as louvre cutting.

More from 151 Chase Side, Enfield, Middlesex EN2 0PW (01367 2889).

Norgren

B38 Instrument

Filter-Regulators - specially designed for the Process and Petrochemical Industries.



INSTRUMENTS

Readings by phone

DUTY ENGINEERS responsible for plant that is being monitored by Dynamic Logic's Teletel public switched network telemetry system can now get readings from any telephone using an additional acoustically coupled terminal supplied by the company.

The engineer — he might be at home for example — only has to dial the phone number of the outstation required and then place the earpiece of the handset on the new Micromaster portable telemetry receiver into the unit.

Battery operated, the telemetry unit can obtain up to nine separate parameters from the outstation. These are displayed digitally together with confirmation of site identity.

Dynamic Logic is at Doncastre Road, Brecknell, Berks RG12 4PE (0344 51915).

SERVICES

Paint mixes on fiche

VICKERS Management Services, which recently started offering software services to companies outside the parent group, has completed capture of some 17,000 paint mixing formulae on microfiche for Borealis Vehicle Refinishes of Denmark.

The fiche will be used by the Borealis paint outlets in conjunction with new mixing equipment and special viewers developed for use in flammable environments.

In its present form the system comprises a catalogue and eight separate manuals; 20,000 copies of the catalogues are produced annually for world distribution.

Vickers microfiche alternative provides immense savings in distribution costs alone because the entire contents of the A4 catalogue now occupy only a single 6 x 4 inch sheet of film costing 14 pence.

Vickers Management Services, Newcastle on Tyne (0632 738524).

Contact
The weekly with the business leads
Ring: LEE GORING
01-643 8040 ext 4306

Theatre Royal, Haymarket

Reflections

The story of Madame du Barry and George Greive, the Northumbrian revolutionary, who descended upon her chateau at Louveciennes in 1793, and hounded her to the guillotine, is a version of Beauty and the Beast composed by history. It seems odd that no-one should have tried to dramatise it before now. Here ready-made are a set of drives to which a 20th-century audience might be expected to relate, envy, sexuality, privileged elitism under threat from levelling fervour perverting justice to its own ends.

John Peacock helps himself to all of these ingredients and stirs them patiently into his play, but he has some difficulty in getting the mixture to rise until the final scene when the lady is truly doomed and at last begins to realise the fact. He picks up the story at the point when Mme du Barry, making a fourth visit to London after the assassination of the Duc de Brissac, foolishly determined to return to France. He sets it in her elegant salon now a shambles with its walls disfigured by graffiti and its great chandelier in ruins.

At the centre of the wreck stands Greive in his citizen's uniform ordering her maids about and her Bengalese servant. The shaven skull, the gimlet eyes and the gritty vowels of Donald Pleasance, establish at once a strongly malevolent presence for the role. As he instructs Gordon Gostelow's bumbling clerk to make an inventory of all the du Barry's possessions we await the appearance of the lady. It is not long before the doorway frames a radiant Dorothy Tutin in a tightly-waisted, volu-



Dorothy Tutin and Donald Pleasance

Wigmore Hall

Academy Octet

The Academy of St. Martin-in-the-Fields Octet was created in an attempt to recapture "something of the sensibility" of the Academy's earliest concerts in 1959, when the group consisted of a dozen players and its repertoire was exclusively baroque. But now the Octet is moving into chamber music as well. On Saturday evening at the Wigmore Hall it demonstrated the rewards of tackling sextets and octets as a scaling down of a larger ensemble, rather than as an ad hoc expansion of an established string quartet.

To view the Academy Octet entirely as its parent orchestra writ small would be a mistake. For this concert it was led by Hugh Maguire, highly experienced in quartet playing, yet here less self-conscious than

when he was leader of the Allegri Quartet, with collective responsibility weighing more heavily. The opening of the Brahms Sextet in G major, indeed, was almost too impersonal, the tempo at the slowest limit of Allegro non troppo, the first violin's melody objectively poised and etiolated of tone. A more robust second subject from the first cello restored equilibrium and set the movement on a course of greater involvement, in which textures remained always lucid—partly thanks to Brahms's skill, but also to intelligent, unselfish performance. A scherzo, too, of extreme limpidity, paid dividends, but the Poco Adagio really needed more personality, more flesh on the bones of the variations. The finale displayed

the ability of the Octet most forcefully, its experience in fusing the most precise high-speed bowing with effortlessly comprehensible expression.

The Mendelssohn Octet is similarly an ideal vehicle for these players. Chamber sonorities were here abandoned for block orchestration and strenuous attention to dynamics. Again the opening was tentative, suspicious of the flood of invention, unwilling to yield to its spontaneity. That soon passed, however, and some moments of uncertain balance in the Andante aside, the rest of the work was confidently expansive, rough-hewn textures juxtaposed with the lightest, most casually exact articulation.

ANDREW CLEMENTS

The City University, EC1

Music at TCU

by DOMINIC GILL

The City University in St. John Street offers a music degree course of unusually broad base: not the traditional B.Mus., but a B.Sc.Mus. embracing a wide range of musical studies from acoustics, aesthetics, ethnomusicology and the psychology of music to general music theory and, especially, performance—this last emphasised by close links with the Guildhall School. This broad outlook helps to make TCU's one of the liveliest, in spite of being also one of the smallest and newest, music faculties in the country: the closest parallel is perhaps with York in its early days—York graduates indeed number significantly among the teaching staff.

TCU also offers as one of its most important facilities an electro-acoustic studio, which is still expanding, shacked only (like music departments everywhere, except perhaps that of the Ministry of Defence) by lack of funds. But even financially, TCU have been luckier than some. Their studio is about to move into newly converted premises in the basement of the university's Centre for Arts; and work there in the field of "electro-acoustics" in the widest sense, from high-quality recording pure and simple to research into electronics and computer controls, will rely in its line of development on vasty expensive and elaborate hardware systems (like IRCAM's in Paris) than on smaller, more flexible and much cheaper systems of micro-processor control.

From the start, one or another aspect of the studio has played a fundamental role in the music course's curriculum; and on Wednesday and Thursday last week TCU offered some of the recent work of its composers and performers in three public programmes entitled "Electro-Acoustics in Concert." It was an event of substantial achievement, as well as firm promise: programmes unfolded without technical hitch; each more the mark of careful and imaginative planning; standards generally, both of performance

and composition, were remarkably high.

What in justice calls for the space of three reviews must be condensed into one. Three pieces of pure tape-music all made a strong impression, and of those especially, by the postgraduate student Alejandro Vinaso, for their variety of gesture and richness of colouring. *Danza para un folklore imaginario* embellished a dark, unrelenting pattern tread with a tracery of melody and texture, elaborately manipulated among four loudspeakers. Longer, and still more elaborate, was Vinaso's *Una Orquesta Imaginaria*—dense enough in its movement, and in its exuberantly orchestral conception, to demand many more hearings, but powerful enough to move into newly converted premises in the basement of the university's Centre for Arts; and work there in the field of "electro-acoustics" in the widest sense, from high-quality recording pure and simple to research into electronics and computer controls, will rely in its line of development on vasty expensive and elaborate hardware systems (like IRCAM's in Paris) than on smaller, more flexible and much cheaper systems of micro-processor control.

The only substantial disappointment of the three programmes was not, as it turned out, a contribution from the university at all. Three short pieces offered by the Canadian horn-player James MacDonald for amplified piano and tape were unimpressive, unsurprising, and the best of them, a *Fantasia for horns* by Hildegard Westerkamp, I suspect would have had stronger impact left in its original form for tape alone. Van Horn's *Boogie* by Steve Ingram had no horn in it at all: a good-humoured, jazzy essay for amplified piano and tape, stylishly delivered by Mark Lockett—though this was the first piece I can remember in a long time whose performance is actually upstaged by the composer's own programme note.

Mr. Lockett also played, with fine conviction and no little bravura, the 30-minute piano piece *Playground Games* by the Californian composer John Adams. *Phrygian Gates* is essentially a sort of sweet-toothed

systems music which stands in the same relation to Steve Reich's *Drumming* as, for example, Mike Oldfield's *Tubular Bells*. Adams has declared, "In America we are tired of theory; we are trying to rediscover magic." Apart from the basic misapprehension that the two are incompatible, why is it that the search for magic, from Messiaen to Stockhausen to Pink Floyd, so often leads no farther than the triumphant rediscovery of kitsch?

A major contribution to the first and last concerts was made by TCU's resident vocal group Vocem, singing music for solo voices amplified (or otherwise electronically treated). The last three minutes or so of Simon Emmerson's *Ophelia's Dream* were the most enchanting: a dance curfew of electronic reverberation built up from an assortment of phonemes. The digital echo for Kevin Jones' *Text Years* (a bad pun on "textures") seemed either not to be working very well, or in any case not to add a great deal to the effect—I wasn't surprised to learn that the piece had been originally conceived with larger forces in mind.

Where the murmurs die, a new piece by Alan Belk, was an unashamedly Beethoven-inspired essay admirably accomplished in construction, and well presented; but more original, and far more gripping, was Mr. Belk's own account of Roger March's *Dum*—a splendid, zany monologue delivered with superb confidence and just the right pinch of hard dramatic sense. That was a memorable high point; but the highest, and aptly also the finale, was Vocem's performance of Beethoven's *Choral Fantasy*, a polyphonic sequence for eight amplified voices first given in London by Swingle II four years ago. Once or twice Vocem's lack of a perfectly polished Swingle-technique let them down; but never rudely—and they caught all the vital elements of the music, its humour, pathos and sensuousness, and its serene too, with marvellous vigour.

Covent Garden

Gloria by CLEMENT CRISP

Death and the after-life has been an inspiration for Kenneth MacMillan's choreography since the early *Journeys* which he made for American Ballet Theatre over 20 years ago. Two major works of his maturity *Das Lied von der Erde* and *Requiem*, have shown how potent is the response which this theme excites in his choreography. Now, in a setting of the Poulenc *Gloria* which received its first performance on Thursday, MacMillan returns to this same subject, to magnificent effect.

The immediate pretext for the work is that last generation who felt the full brunt of the First World War. As programme note MacMillan quotes a poem by Vera Brittain from *Testament of Youth*. The crucial lines which help fix the mood of *Gloria* run: "But in that song we heard no warning of time, nor visualised in hours benign and sweet/The threatening war that our adventurous feet/Would starkly meet."

The fine setting by Andy Klunder, recently graduated from the Slade School—is a skeletal metal frame placed on a rising slope of ground. The cast appear, breasting this slope. They are revenants, the girls ghost-grey, the men in tights that seem rotted, vestigial uniforms, and wearing tin hats.

The ballet's progress is a contemplation of lost hopes, lost joys, lost selves. And as so often with MacMillan, the evocation of the past—*Anastasia: La fin du jour*—is a matter of feeling and attitudes rather than of a superficial naturalism. The choreography uses a large cast, but is centred upon a trio—Jennifer Penney, Wayne Eagling, Julian Hosking—and a quartet in which Anthony Downson, Ross MacCibbon and Ashley Page support Wendy Ellis. There is no identification of relationships, though *Testament of Youth* may suggest certain parallels, and the true importance of the ballet lies in the thrillingly inventive, rich and entirely apt movement that theme and score have inspired in MacMillan.

To the soprano solo *Domine Deus* there is a duet for Penney and Hosking of gentle, trusting affection: the succeeding *Domine Fili unigenite*, musically joyous, is no less so in the writing for Wendy Ellis and her companions. The misereve nobis finds Penney, Eagling and Hosking caught in poses of heart-stirring sculptural beauty. Everywhere, MacMillan finds dance imagery that matches both the gravity and the happier aspirations of his score, suggesting that his ghosts survey what was, and what might have been, with some dispassion. If there is the bitterness of regret and accusation, it is most clearly felt in the writing for Eagling, to whom falls the final section

of the ballet when his companions have returned to their rest—like troops going over the top into action—and he makes a last tearing circuit of the stage before plummeting backwards out of sight.

Performances are magnificent. Penney, Eagling, Hosking, Wendy Ellis and her companions, all are seen at their best. Musically *Gloria* is no less commendable, with Teresa Cahill and a section of the Opera chorus under Ashley Lawrence.

About this notable acquisition to the repertoire, and the admirably re-dressed and revised—though under-danced—*Four Seasons*, more after a later performance.



Julian Hosking, Jennifer Penney and Wayne Eagling in 'Gloria'

Sheffield Crucible

The Summer Party

by MICHAEL COVENEY

After having his wings singed in the West End four years ago with the commercial flop of *City Sugar*, it is good to find Stephen Pollakoff reasserting himself on a large stage in front of a large audience.

Peter James's luscious and full-blooded production of events backstage at a pop concert near Southampton develops Pollakoff's obsession with youth culture and a marvellous escapade in character portrayal. The central character is a high-flying chief constable, Kramer, who ends up being the star of the show he has come to patrol. Like all Pollakoff's major portrayals, Kramer's life and philosophy is physically contained on the stage by both an area designed for his operation and a symbol, a car that represents authority and his bed for the night. The rest is a tree and a green sward, a distraught sponsor, his photographer wife, a detained typist, and two well-contrasted policemen, fill in the picture.

Kramer's task is to keep the crowd happy, keeping control, repressive but humane control. But he also wants the evening to succeed. As do we all. That success is threatened by the sulky arrival of a punk boy king who smashes glass by staring at it and resistance by ignoring it.

Several stunning theatrical coups jolt what occasionally becomes a static discussion area into exciting life. First, the misdirected laser show has the

company scurrying for shelter. Then, with the concert stage seductively superceding the grassy knoll, the boy redeems himself in our eyes by falling after a massive build-up and a quick burst of "Oh for the wings of a dove." The play kicks when Kramer fails to elicit an apology from the typist (Patti Love) and sends her off on a trumped-up charge. He goes to sleep in his car, having saved the day by introducing the baying, unseen mob to the delights of the dawn.

As Kramer, Brian Cox, an actor who never fails to delight and intrigue, employs his considerable talent of Celtic understatement and craggy authority to fascinating effect. The host couple are well played by Alan Rickman (who increases his resemblance to a sort of new wave Alan Badel each time I see him) and a charmingly self-aware Hayley Mills. Miss Mills even scores with comic lines that you would expect her to find at prospecting as they do at the expense of the idea of a Mayfair good-time girl exposed to the glare of publicity. Lovely work, too, by Mark Drewry as a young copper unbottling marital woes with the champagne, and little Dexter Fletcher as the terrifying child wonder.

Goldsmiths' Hall

Kennedy/Demenga

by ANDREW CLEMENTS

Duos and solos for violin and cello seem austere fare for the opulent surroundings of the Goldsmiths' Hall. But Nigel Kennedy and Thomas Demenga make a well-balanced young team, both of them fluent technicians of clear, muscular tone, and respectful, considered interpreters. They began their recital for the City Music Society on Thursday evening with Ravel's singular essay in austerity, the Sonata for violin and cello of 1922—Ravel at his most laconic and, to my ears at least, most credible.

Kennedy and Demenga did not go out of their collective way to avoid dryness: the outer movements were confined as severe, intellectual exercises, their tricky rhythmic ambiguities and bithonal effects scrupulously rendered—and valuable self-deprecating moments of wit were as a rule overlooked. The throwaway ending of the *Traviata* was simply that—thrown away—and only the *Leit* emerged whole. A performance in the making still, perhaps, already wonderfully precise but not yet ripe and flexible.

Kodaly's Duo poses fewer problems of an intuitive kind and demands a more conventional bravura. Kennedy and Demenga played it quite

superbly; difficult to imagine a better version by non-Hungarian performers, unless it be by an equally accomplished duo of greater richness and warmth, more willing to experiment with nuance. Emotions were held on the tightest of reins throughout: unexpected frissons were confined to awe at the accuracy of Mr. Kennedy's high Esting playing.

Between the duos each musician contributed a substantial Bach solo. Mr. Demenga

selected the third cello suite, Mr. Kennedy the G minor violin sonata. The former was the more interesting, perhaps because less perfect: clearly thought through, yet sacrificing articulation for fluidity in the Courante and lured into unwelcome indulgence by the popularity of the Bourées. Mr. Kennedy played his sonata exquisitely, seemingly incapable of a less than beautiful sound, but behind the notes there seemed little substance.

Authors' award

Kingsley Amis has chosen *The Pilate Plot* (Heinemann) as the most promising first novel of 1979. The author, Martin Page, received a silver-mounted quill at a dinner at the Authors' Club.

Martin Page, a former Moscow correspondent of the Daily Express, has previously published a satirical anthology of big business called *The Company*.

The Authors' Club First Novel Award was founded by Laurence Meynell in 1954. Past winners include: Alan Sillitoe (1958), Robin Douglas-Home (1964) and Paul Bailey (1967). Last year, Katherine Gordon won the award for *The Emerald Peacock*.

Schnittke premiere

The BBC Symphony Orchestra is to give the world premiere of Alfred Schnittke's Second Symphony *St. Florian*, subtitled "Missa Invisibilia," on Wednesday April 23 at 8.00 p.m. at the Festival Hall.

The symphony is a BBC commission and the composer is hoping to be in England to attend its rehearsals under the BBC SO's chief conductor Gennadi Rozhdestvensky.

Schnittke is one of the Soviet Union's leading composers who reconcile Western avant-garde techniques with traditional Russian styles.

RUGBY UNION BY PETER ROBBINS

A great day for England and rugby

AFTER AN improbable start to the season in matches against the Argentine and New Zealand, England, by beating Scotland 30-18, have simultaneously carried off the greatest prize in rugby, the Calcutta Cup, the Triple Crown, the championship, and of course the Grand Slam.

If the major share of the accolade goes to the players for the dedication to what seemed a hopeless task in November, one must never overlook the part played by the coach Mike Davis and the selectors. Davis prepared his squad beautifully for each game and widened the horizons of the team and the individuals. Scotland's coach, Nairn McEwan, also commands admiration for the job he has done for his country.

Not since 1957 have England had such success and the spirit of the game also brought back memories. What a joy to see two sides using skill and intelligence to win rather than just the bludgeon of physical bulk. It was a great day not just for England or Scotland but for the game and its traditions.

On Saturday, England produced a revealingly expansive game when they needed to Scotland, to their eternal credit, responded with some

dazzling approach work which unfortunately was limited in its finishing power or polish. It was in fact a game of two distinct halves and fortunately England had 19 points in the bank at half time. The valuable lead was earned yet again by the machine-like performance of the pack. Essentially the game was won by England's marvellous front five, but this is not to deny the efforts of the back row. The sight of the Scottish scrum on the retreat was a great tonic to England's backs.

The Scottish second row, I felt, had the better of things in the line-out, except in the vital secondary possession, where Beaumont, Cooton and Utliey moved more quickly onto the ball. That was a vital bonus. The scrum superiority spilled over into the mauls and rucks in the first half, and Horton's accurate kicking pushed England forward ruthlessly.

Scotland indicated their own aspirations with a sharp counter-attack from Rutherford but, deprived of possession, they did not have anything like the choices that England enjoyed in the first half. Those choices gave Woodward the chance to demonstrate his pace and subtlety.

Scotland had to cave in before such clinical pressure, but such pressure was possible only because of the good distribution of the hard-won possession, and also because Hare gave the rest of the team great confidence by his superb fielding.

So England led by 16 points at half-time and were apparently running away with things, but Irvine kicked a second penalty goal to revive Scottish hopes. It was then that the whole significance of the England performance was encapsulated in a series of four successful rucks before Smith scored.

Scotland had got back to 12-23 when England had the piece of luck all confident sides welcome. Hare kicked a penalty, and then Carleton gathered a helpful bounce from a delicately-placed chip from Dodge. That made it 12-30 to England, and they were only too glad to hear the whistle go because Scotland were flinging everything at them.

Scotland's revival was possible because Gray and Tomes steadily won more line-out balls and there was a significant increase in the rucked possession, which Leslie and Beattie set up. Beattie once again showed some moments of brilliance and the very highest

promise for one so young. The Scottish surge up front was sternly contested by England but Laidlaw and Rutherford, more liberated at half back, ran from everywhere.

Yet it was Irvine, so dismal against the Welsh, who was the real *deus ex machina*, along with Renwick and Johnston. Tomes's try actually went through 14 pairs of hands, and that figure does not in any way account for the skill, speed and daring which went into it.

Scotland can indeed be proud of the way they played and they were finally thwarted not just by the 12 points but by some outstanding defence from Dodge and Woodward in the centre and Utliey and Neary round the fringes. Neary set a new record for England's players with his 43rd appearance.

It was fitting for him to come off the field after so many years of disappointment with these prizes. Now the senior pros of this England side can retire content with being part of English rugby history. The young can look forward to further honours and look back with gratitude to the senior members. As for Scotland, it cannot possibly be long before their young lions earn the fruits of their labours.

SOCCER BY TREVOR BAILEY

How Forest gave away the Cup

IT WAS not so much a case of Nottingham Forest losing the League Cup at Wembley on Saturday but rather of presenting it to a grateful, if somewhat limited, Wolverhampton Wanderers, who were no better than an average First Division team in a non-vintage season.

Forest failed because they gave away a fabulous goal in the 67th minute when Shilton and Needham collided and, despite all-round superiority and numerous chances, were unable to score themselves.

This surprising and unnecessary defeat means that for the first time since the Clough-Taylor partnership steered them into the First Division they finished without a major honour.

Everything now depends on the outcome of the match in East Germany next week against Dynamo, who already have established a one-goal lead in the first half, with Francis employed largely as right-hand member of their midfield four.

Although Francis was moved into the centre for part of the second half, one cannot help feeling that if he had started there before Wolves settled down he would have exploited the obvious weaknesses of the

two opposing centre backs. Secondly, the club have never adequately replaced the drive, passion and skill of Gemmell in midfield. He also had the ability to bring out the best in Robertson, who disappeared for long periods against Wolves.

Thirdly, Forest are at their most effective breaking quickly after a period of intense pressure, footballing counter-punchers. They possibly suffered from too much possession on Saturday, while opposing sides are also beginning to understand their style, which has not changed since they arrived in the First Division.

Fourthly, Shilton, who was not only a brilliant keeper, but even more important never made a mistake, has become a mistake this season. If it had not been for that one unforced error, my money would have been on Forest winning in extra time.

Finally, the magic of Brian Clough, which to some extent consists of convincing his players that they are better than they are, and therefore enabling them to play above their ability, could understandably be on the wane. Inevitably the years must have drained away some of his charisma,

which produced the motivation, because the team has heard it all before.

Apart from the League Cup in 1974, supporters of Wolves have savoured little success since the 1950s, so that it was good to see some glory come to this fine club.

Their victory also provides a passport to Europe, but they will need to improve if they are to make much impression, something of which John Barnwell, who has done so much to revitalise them, must be only too aware.

Their talented and expensive lead forwards Grey and Richards deserve a much better service, while the crossing of Daniel from the right and Eves from the left lacked accuracy.

In midfield Carr and Hibbitt brought some touches of class to an interesting, if mediocre final.

The most ironic feature was that Bradshaw, who made several errors, and looked uncertain every time the ball was crossed in the air, came off an undefeated hero, while Shilton, who had little to do and made one mistake, goes down, rather sadly, as the villain of the piece.

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A determined Mr. Carter

THE CENTRAL message of President Carter's latest financial package is clear and important. The President has decided, against the conventional wisdom of both politics and of Wall Street, that a determined assault on inflation is now an overriding electoral necessity, as well as a clear national priority. He has deliberately chosen a number of measures, generally considered to be vote-losers—budget cuts, the tax on petrol, restrictions on consumer credit to drive this message home. Technically, the measures are rather less radical than some earlier packages, and official forecasts of the likely result are so tentative as to be invisible, but the message remains clear: the President will go on trying till he gets results.

Fine tuning

There has naturally been some scepticism in the first reaction to the measures themselves. There have been too many packages, and too many faulty forecasts, to allow general confidence that just this, and no more, is what is required. The fiscal proposals are aimed at a balanced Federal Budget, a figure of some symbolic importance, and the fulfilment of a 1976 election pledge. However, a balance in the U.S. Federal Budget is not by any means the stern stance which the same term would imply, say, in the UK. The proliferation of off-budget agencies, the large share of welfare spending carried by local budgets, and the fact that nearly all public utilities are privately financed, mean that the Federal fiscal balance is of secondary importance. Certainly the \$15bn cuts proposed are the finest of fine tuning when measured against the size of the U.S. economy.

The monetary measures are also open to the comment that there is rather less in them than meets the eye. In some respects they mark an important extension of credit control, notably in the reserve requirements now imposed on large banks which are not members of the Federal Reserve system and on such new intermediaries as the money market mutual funds. On the other hand there are extensive loopholes in the new restraints, to spare such already depressed sectors as housing and the motor industry. Equally, the Fed has done everything possible to avoid

forcing interest rates up any further, leaving the official discount rate unchanged, and urging banks not to seek the usual margin over the cost of marginal funds when pricing loans. The aim is clearly to induce unofficial credit rationing so far as possible. The combination of marginal penalties and official priorities is very familiar in the UK.

It would be quite wrong, though, to look at this package in isolation, and conclude that nothing very drastic has been done to address the basic problems. It is the cumulative effect of all the measures taken over the past 18 months, and especially since October 6, which ought to be assessed. There has been an enormous rise in interest rates, and an unprecedented collapse of the long-term bond market. The dollar has recovered sharply, despite large-scale intervention to support what have now become weaker currencies. Consumer credit demand in the U.S. has begun to ease, and some industries relying on borrowed funds to finance long-term investments are already in some difficulty. Most dramatically, the commodity market boom has topped out and reversed.

It is not at all surprising that some of the most striking initial effects of U.S. credit restraint should have been seen in international markets.

Imposing strain

However, domestic results have been evident and, indeed, the Fed had strong reasons for treading delicately in its latest measures. The collapse of the money market—a normal and unhappy result of inflation psychology—is a structural change of fundamental importance. The corporate sector will be more dependent than in the past on bank finance. A regime of high interest rates is also imposing strain on financial institutions. All this will help to induce caution and policy must aim for restraint, not collapse.

In our judgment, then, the measures will prove adequate, though figures for loan demand and money growth may tell a different story for some time yet. The markets should not be ruled by one set of statistics. The U.S. economy has had a few weeks to get used to a strong dollar. It must now begin to count also on a determined President.

A President in unmapped territory

By JUREK MARTIN in Washington and STEWART FLEMING in New York

THE new vogue word in Washington is "candid." In foreign policy, it is candid for the President of the United States to admit a mistake in voting against Israel in the United Nations. In economics, it is candid to acknowledge publicly that the Federal Budget, with all its attendant economic projections—which was promoted, with such fanfare at the end of January as being "lean, tight and austere"—and appropriate to meet the challenges facing the nation—has become, six scant weeks later, nothing of the sort.

It is candid, too, the argument runs, for a sitting president to have the nerve to introduce the sort of measures Mr. Carter has done in the thick of an election year, thus running the risk of alienating precisely those constituencies whose support he must court. In reality, the political risks may be over-rated since it appears, unless lightning strikes that nothing that Senator Kennedy says or does is going to win him the Democratic Party's nomination, while the Republicans seem intent on providing an alternative to Mr. Carter in the person of Mr. Ronald Reagan who could be unelectable in November.

It is also a mark of candour these days for senior officials of the Administration to admit that—as they were taken unawares, they claim, by the surge in both inflation and inflationary expectations in the first two months of the year—they really do not have a precise estimate of the impact that this latest anti-inflationary package, the fourth of Jimmy Carter's presidency, will have on the American economy.

Single digit forecast

All that Mr. Charles Schultze, chairman of the Council of Economic Advisers, would say over the weekend was that he now thought the long-awaited recession would be "smaller and later"—with the economy contracting in real terms from the fourth quarter of last year to the first quarter of this by about 0.5 per cent, not 1 per cent, and with inflation being a percentage point or more higher than it would otherwise have been, at a little under 12 per cent on the Consumer Price Index. President Carter confidently predicted that by next year inflation could be down to the "high single digit level"—but the chairman of the Federal Reserve Board, Mr. Paul Volcker, appeared sceptical about even this through the perennial haze of his cigar.

These qualifications are hardly surprising since the Administration and the Fed (it would be more accurate to put the Central Bank first, since the main onus still rests with it) are in fact engaging more in

psychological than practical warfare against inflation—and with limited tools. The \$13.14bn in spending cuts next year (in a \$600bn plus budget) may hurt domestic constituencies but are far from swingeing. Indeed the budget itself is being balanced as much by fiscal legerdemain through the raising of additional revenues as by deep economies, though the symbolic significance of balancing the budget should not be underestimated. Mandatory controls over wages and prices have been absolutely ruled out. And the economy itself still remains vulnerable to external inflationary shocks over which neither Mr. Carter nor Mr. Volcker has great control.

The most important thing to bear in mind about this latest package is that it was not introduced simply because the Consumer Price Index suddenly took off in January and February at a nearly 20 per cent annual rate. December's OPEC price increases and high domestic interest rates made that, as Mr. Volcker bluntly pointed out, predictable.

U.S. business, in the midst of the second period of soaring interest rates inside six months, is in a much more vulnerable condition than it was last October when the Federal Reserve launched its last anti-inflation package.

When the Carter Administration framed its initial budget proposals in December, it was well aware that rising interest rates and oil prices threatened some acceleration in the rate of inflation this year.

What it did not, and according to Treasury Secretary Mr. G. William Miller, could not have anticipated was that the grim inflation news would trigger a drastic change in inflationary expectations in the financial markets, a change which is threatening permanently to alter their structure to cause long-term damage to the U.S. economy.

The most vivid illustration of this pessimism is seen in the long-term bond markets. A slide which began in the wake of the Federal Reserve Board's October 6 anti-inflation package took bond prices to historic lows towards the end of last year. But the New Year's inflation news triggered an avalanche.

By early this month, according to investment bankers Morgan Stanley, close to \$500bn—around 30 per cent—had been wiped off long bond values since October. The number of investment houses actively making markets in a full range of debt securities had shrunk to five or six from 40 to 50 a year ago.

The virtual collapse of the bond markets has forced some prime borrowers, particularly utilities like the American Telephone and Telegraph Company (AT&T), to pare back capital spending budgets to the minimum in order to avoid issu-

ing securities at crippling interest rates.

"We have delayed or put off everything we can which does not interrupt normal operations," said Mr. William Cody, Assistant Treasurer.

For weaker companies, the problems are serious. Last week Sea Containers, one of the world's largest ship and container leasing companies, announced it would be selling a third of its ships because it cannot sustain its present level of operations with floating rate debt costing 20 per cent.

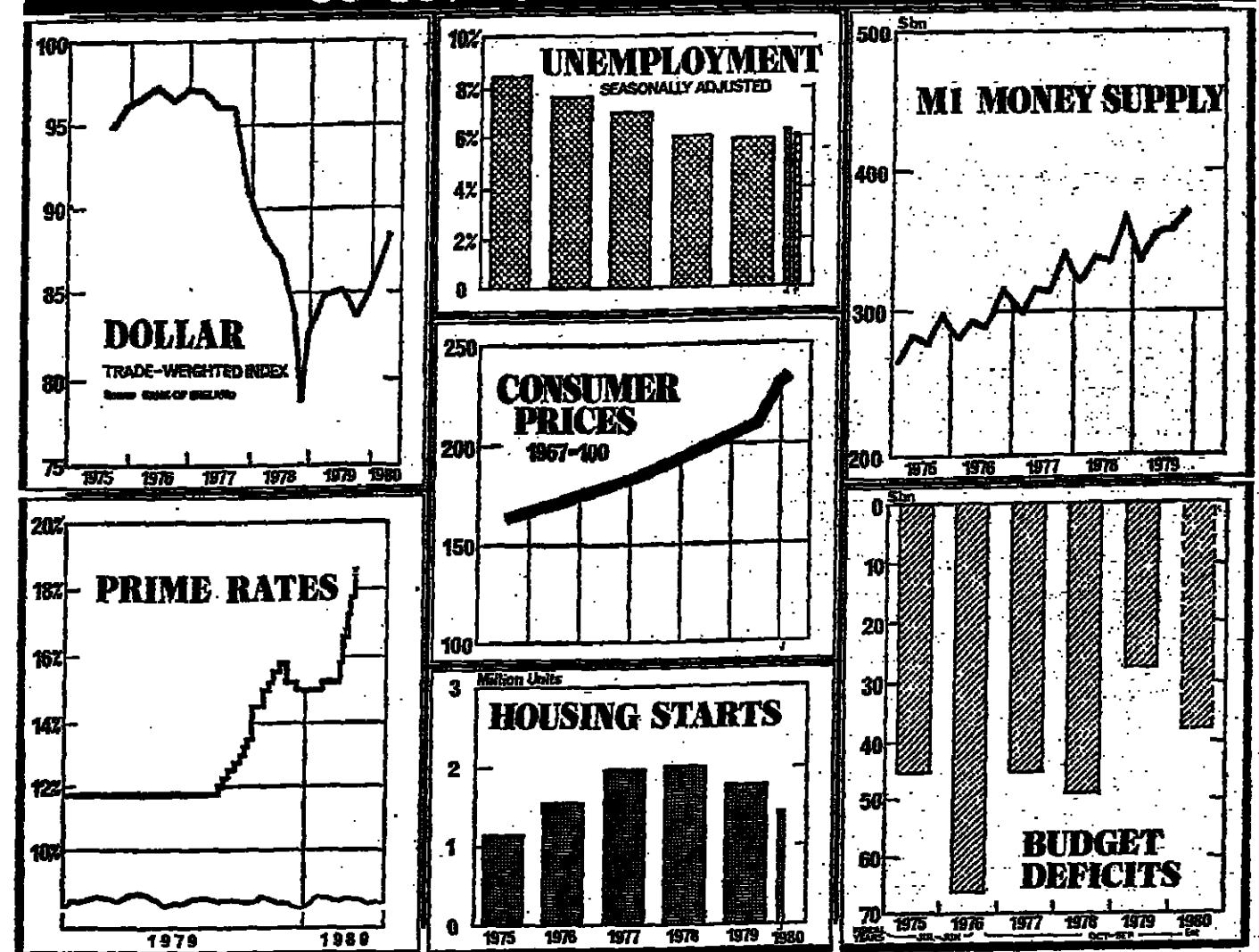
Financially stretched capital-intensive industries have suffered most. Braniff International, the fast grower of the airline industry in the past five years, is desperately putting together a financing package with insurance companies which is based upon the lenders taking options to convert their loans into Braniff stock at advantageous prices. Other airlines have been forced to borrow from banks at high rates to finance new aircraft which are vitally needed in order to cut fuel consumption and stay competitive. Anheuser-Busch, the country's leading brewer, has gone to the banks for \$100m in long-term funds rather than the bond market, which last year supplied over \$550m to corporate borrowers.

The crisis in the bond market is, however, merely symptomatic of a broader malaise which has begun to spread through the financial system and which is being called "the revolt of the long-term lenders."

Property financing has ground to a halt on new office and shopping facilities. The housing market, too, even in California and Texas, is heading for what some economists believe will be its worst slump since World War II.

The long-term suppliers of mortgage credit are raising their interest rates to 18 and 17 per cent in order to secure new borrowers. Most of what funds they possess have been finding their way into New York's money markets rather

US ECONOMY: KEY INDICATORS



than into housing.

In the longer-term the drying up of long-term finance clearly has disturbing implications for capital investment and productivity of U.S. industry.

For the weaker companies it is becoming a question of survival at these high interest rates, and the same can be said for some parts of the financial system—particularly savings banks and thrift institutions which have around 70 per cent of their home loans earning interest at under 10 per cent while new money is costing over 15 per cent.

But if Washington appears to be worried about the risks of over-kill it is equally worried about the danger of inflation reaching the point where it is running out of control.

It is this threat, and the threat that double digit inflation could run on for the foreseeable future which Wall Street wanted to see tackled with a firm commitment and bold substantive decisions aimed at curbing Government spending, particularly in the area of transfer payments such as social security.

Self-inflicted discipline

Wall Street economists already seem to have decided that the fiscal package, whose content was thoroughly leaked in advance, does not meet these criteria or hold out much hope of them being met in the future. This in turn would seem to cast a shadow over hopes of any dramatic reversal of inflationary expectations.

The consumer credit element in the package is already being dismissed as tampering at the margins with a declining problem. The consumer appears to be disciplining himself.

But the Fed's other measures are being taken more seriously. The tightening up of the marginal reserve requirements on managed liabilities at banks, and the closing of big gaps such

as the banks' freedom to transfer loans offshore, could start to bite soon. This is one reason why short-term interest rates are expected to continue their steep ascent.

There is also clearly going to be greater moral suasion on the banks to curb their lending growth in line with the Fed's credit expansion targets.

In short, the Fed is sticking with its gradualist monetary policy. Wall Street would like to believe that this approach, which has now taken interest rates in the money markets to levels which are beyond the ken of its economic models, will start to make an impact on inflation. But the events of the weekend have not convinced business that either the President or the Congress can deliver their side of the package.

This reservation is understandable. For one thing, President Carter does not exactly possess a record for constancy. For another, implementation of much of the fiscal side of his package still resides with the Congress. The Administration claims that it has engaged in "unprecedented" consultation with Capitol Hill in framing its measures and that, therefore, chances of passage are good. Indeed, over the weekend, two Congressional budget leaders, Senator Muskie and Representative Galm, said that, if anything, Congress was likely to make deeper cuts in spending than those outlined by the President.

But Congress rarely resolves things so easily. The powerful interests whose own will be served when the actual details of the expenditure cuts are made public at the end of this month will work to prevent their implementation. Already public reaction from business, labour, the cities and States has been negative. There has been intense debate inside Congress in the past week over whether defence spending can fairly be exempted from budgetary stringency. Anything which smacks of increasing taxes (as

for example, the proposed withholding levy on dividend and interest payments does) is hardly popular. Anything which extends the powers of the federal bureaucracy, which is explicit in the Fed's expanded role, the beefing up of the Council on Wage and Price Stability, and the Department of Energy's role in levying the oil import fee, is certain to provoke hostility—and, indeed, frustration, since Congress cannot, in these areas, prevent the President from working his will.

Energy policy testing point

Mr. Carter, after all, is not the only politician running for re-election this year and Congressmen and senators do not like to distance themselves too far from their constituents.

A particular litmus test will be whether or not Congress will respond to the President's request for a motor fuels tax to succeed the new fee on imported oil, the presidential authority for which expires in September next year. In spite of the overwhelming evidence that American dependence on imported oil is a prime ingredient of domestic inflation, it has taken the legislature three long years to disgorge a comprehensive energy policy. Even now, not all the pieces are in place, and such consensus as exists remains very fragile.

The President was indeed candid when he said that the cure for inflation would be both slow and painful. His senior officials have been just as direct in warning that inflation is likely to remain at or above existing levels for at least a few more months. This, in itself, constitutes a test for the nerve of the Administration and the Fed, for the financial markets and for the politicians, all of whom are now sailing in waters which, familiar though they may be in Europe, are still largely uncharted in the United States.

The threat to Europe

THE BEHAVIOUR of the French Government over the British demand for a substantial reform of the European Community's budgetary system is becoming more and more extraordinary, and more and more dangerous. Until recently, it seemed to be employing the classic foot-dragging tactics familiar from many previous negotiations, in order to minimise the concessions which might have to be offered at the end of the day. Since last week's Cabinet meeting, however, it almost looks as if the French Government is deliberately attempting to escalate the conflict with Britain, and thus risk turning what should be an important house-keeping issue into a major political battle.

Political row

This could be extremely dangerous, for two reasons. In the first place it would be very unwise for the French Government to underestimate the lengths to which the British Government might be provoked to ensure that the budgetary question is taken seriously and dealt with equitably. In the second place, the European Community, and the Western world in general, cannot afford, in the wake of the troubles in Iran and the Soviet invasion of Afghanistan, a serious political row between Britain and France.

It must be admitted that the British Government has not handled its side of the negotiations with much subtlety or imagination. By insisting that the budget be treated in isolation, rather than in a larger package of issues, it has played into the hands of those in France who are reluctant to make any concession. But when the French Cabinet issues an explicit threat that it may not even agree to discuss the budgetary issue at the next European summit, the stage is clearly being set for a major confrontation.

Obviously, this threat would only be operative if the Commission fails to put forward a formal proposal in good time, but this condition does nothing to hide the harshness of the threat. If the French Government is prepared to say out-

loud that it may not even dis-

cuss the issue under negotiation, it raises the question whether it intends to permit a settlement at the next summit. It is not entirely surprising therefore that some voices in Germany have been suggesting that the summit should be postponed or cancelled, though such a suggestion is obviously intended to be more conciliatory to France than to Britain. And if adopted could only increase the tension between Britain and the rest of the Community.

Mrs. Thatcher has made it abundantly clear that her Government has no intention of contemplating withdrawal from the Community, nor even of adopting an empty chair policy. She has also made it clear that she will not rest until there is some kind of settlement which would relieve the UK of the obligation, at once absurd and inequitable, to make large net transfers to other, richer members of the Community in order to help finance an indefensible common agricultural policy.

Damage
This would be lamentable. The French President is facing re-election next year, and no doubt wishes to pre-empt the Gaullists on his right. But all governments in Europe have serious political and economic problems at home, and M. Giscard d'Estaing must surely recognise that France, and the European Community, and Britain, for that matter, could suffer serious damage unless he and the other heads of government buckle down to defusing the budgetary issue. French nationalism has always taken satisfaction from the fact that the common agricultural policy is the Community's only major policy. But even the French must be aware of the old business adage that it is dangerous to drive too hard a bargain, because such bargains do not last. In 1865-66 General de Gaulle asserted that national vital interests should take precedence over Community interests. Unless the budgetary issue is sorted out rapidly, the very notion of mutual Community interests may be gratuitously undermined.

MEN AND MATTERS

Dog fight over Dorset

Busy plugging away at the head of the consortium trying to wrest MG sports cars from BL's grasp, running Aston Martin and nursing his property development interests, Alan Curtis has been badly shocked to discover that his personal business favourite, Air Compton, is in danger of being shot down, and his Compton Abbas airfield of being landscaped into oblivion.

He tells me he has been pursued for some years by environmental campaigners who want his patch of Dorset tarmac rolled up, and admits that perhaps he should have taken the threat more seriously. He is doing just that now, however, as a local council has refused to allow him to develop crop-spraying facilities and build a reception area, following pressure from the lobbyists.

While the conservationists have been sniping for years, Curtis says he is the man who has decided to bring matters to a head, and has scrambled to counter-attack, claiming support from locals, airborne businessmen who use his air taxi service or their own planes, crop sprayers and their farmer customers.

With a couple of kills in the log, his opponents can feel justifiably chuffed. In my book, Airman Curtis, win or lose, richly deserves a sharp smack on the wrist for neglecting one of the prime rules of fighter-piloting and allowing the green belt "bandits" to latch so firmly on to his tail.

Goodbye Vienna

The gold price may have come a cropper, but the cost of advice for steel-nerved bullion buyers is still shooting up. Gold enthusiast Harry Schultz, who claims dubious fame as the world's most expensive invest-



"Good heavens, he's defecting!"

ment pundit, tells me he has been so snowed under by calls from frightened clients that he is thinking of putting up his consultation fee from \$2,000 to \$3,000 an hour.

Chelsea-based Schultz, an affably hawkish American who combines lugubrious warnings of the Russian menace with unstinting support for the return of the gold standard, has for 17 years been carrying a niche in the hearts and bank balances of his international clientele with advice on beating inflation, the taxman and the lurking Communist threat.

His battered visage showing clear signs of the stresses imposed by his prophetic burdens, Schultz is now telling his clients to be "psychologically prepared" for the gold price to fall to \$435. For the moment, however, he counsels against panic and claims soothingly that it could be up to \$900 in time for Christmas. But the kill-joy instincts of the professional seer are hard to suppress. His February newsletter contains the disturbing revelation that the Russians, after mopping up the

whole of the Middle East, will be in Austria, North Italy and part of Germany by 1982.

He counsels wealthy Viennese footloose enough not to up-sticks instantly, to build a second home and stash a crock of gold in South America, keeping on hand only enough small change. Krugerrands to buy a place in the airline queue on the day the tanks pile in.

Dodger deterrent

Fare dodgers beware. British Rail, exasperated by its lack of success in reducing its annual loss of £12m to non-fare-paying passengers, is delving into its legal kitty bag for new ways of getting its own back. Criminal prosecutions are expensive and bring in no money, so cheaper civil actions are being used as a means of recouping its losses.

Passengers caught without tickets, I am told, invariably claim to have lost them, and it is difficult to prove that they never bought them in the first place. But now BR thinks it can force payment by application of paragraph 10 of its Conditions for Issue of Tickets, which states that travellers must hand over their tickets on demand. "Passengers failing to produce their tickets," it continues in small print, "will be liable to pay the appropriate fare."

In its eagerness to prove the legal worth of this condition, said to say, BR fell flat on its face. It tackled gentlemanly fare dodger, who had lost it, he said, after it had been punched several times by inspectors during his trip. Before the action, however, BR stated that it did not dispute that the luckless traveller had set off properly ticketed, but still it sued away, citing condition 10. The corporate face, however, turned to condition red when the County Court registrar denounced the claim as "disgraceful and offensive." Not to be deterred, I hear

that the rail authorities are still set on running a test case through the courts, establishing the rectitude of condition 10, and staging a deterrent onslaught on the free-loaders.

Clearance sale

Paul Getty never seemed to have any trouble when he was alive, but his Los Angeles executors are apparently finding themselves increasingly embarrassed by the richness of his estate. What to do, for example, with the 100,000 shares he owned in Getty Oil? As a first stage in what looks like a complex game of pass the parcel, the executors have decided to sell off a large slice on the open market.

Accordingly, they have asked Getty Oil to buy back the shares. But the company has refused to do so, and the ensuing chaos forced suspension of dealings for a while.

By the time the happy hour intervened the Getty Oil price had slipped \$5 from \$82. But this is a mere bagatelle, considering that a year ago the shares were worth only \$40. At this price, the executors' clearance would raise about \$89m.

Word has it that the funds will be bequeathed to one of Getty's memorials—the museum named after him at Malibu, California. But what can the curator do with such a sum? He already runs what must be one of the best-endowed collections in the world, and reputedly has trouble spending his reserves.

Diet of worms

"Landlord, there's a maggot in this pie."
"Come off it, that's fat."
"I know it's fat, it's eaten all the meat."

Observer

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FINANCIAL TIMES SURVEY

Monday March 17 1980



Mrs. Gandhi: direction of economic policy has yet to be set

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INDIA

TRADE AND COMMERCE

Suspense over economic policy

BY DAVID HOUSEGO

THE THREE YEARS of Janata party rule that abruptly came to an end in January with Mrs. Gandhi's election victory now look like an interregnum in India's post-war history. Until 1977 Jawaharlal Nehru and his daughter ruled the country almost continuously since independence. As a result of her success in January Mrs. Gandhi and her son, Sanjay, look like dominating India for the first five years of the 1980s and possibly for the whole decade.

Mrs. Gandhi's grip on the country is now stronger than her father's and indeed stronger than that she achieved during her previous 11 years as Prime Minister. By her massive electoral victory she has not only removed any Parliamentary opposition to her Congress Party but she has effectively eliminated any challengers from within the party itself. Under Nehru Congress was a loose federation of diverse interest.

Mrs. Gandhi has yet to set the direction of her economic policy. Since returning to power her almost continuing preoccupations have been with foreign policy in the light of Russia's invasion of Afghanistan and with reasserting her control over state governments which still remained in the hands of her political opponents.

Nehru's legacy was to provide the country with a remarkably broad industrial base that had its roots in a policy of self-reliance, import substitution and the development of a large public sector

to undertake the major investments. Trade had only a marginal role, accounting for only 8 per cent of GNP in 1965 and expanding to only 11 per cent by 1976.

The export-led growth which had boosted the economies of the Far East—in South Korea trade accounted for 58 per cent of GNP in 1978—has been alien to the more inward-looking Indian tradition. It has been almost in spite of this that Indian engineering companies in recent years have made substantial inroads in overseas markets, demonstrating their capacity to compete in quality and price.

Emphasis

Nehru's emphasis on heavy industry was most forcefully challenged during the three years of Janata rule and particularly by Mr. Charan Singh, who took over as caretaker Prime Minister in mid-1979. The Janata party sought to give more priority to agriculture and to small-scale industry as a way of both increasing jobs and boosting demand in an economy that during the 1960s was plagued by under-utilisation of capacity.

Already, during the last year of Mrs. Gandhi's Emergency, there were signs of a shift in policy. The unacceptable price of excessive protection of domestic industry was increasingly recognised as being an inefficient and high-cost manufacturing sector and an unworkable battery of controls and regulations. Her admini-

stration appeared to be leaning towards a more open economy, a more relaxed attitude towards foreign investment and multinational companies, and increasing support for private industry.

Spurring this change was in part the need to increase export earnings to meet the higher import bill that arose out of the 1973-74 OPEC price increase.

The few pointers that have emerged so far suggest that Mrs. Gandhi is picking up these threads. Both she, and more particularly her son, Sanjay, seem more warmly inclined to the private sector—though in practice this could mean more privileges for selected enterprises rather than any real opening up of the economy to greater competition.

She seems likely to cut back on the higher level of government earmarked for agriculture and to give less priority to small scale and handicraft industries. But in the past she has shown little inclination for long term economic planning.

Mrs. Gandhi has yet to appoint a number of her key economic ministers the delay reflecting her habit of postponing decisions to the last moment. In the case of the economy her immediate concerns are going to be the country's deepening recession and the high level of inflation accompanying it.

After a succession of good harvests, the drought last year has brought a drop in agricultural output. Industrial production is stagnant as well, in spite of a backlog of pent-up demand

resulting from the growth in previous years of agricultural incomes. But India's ability to realise sustainable industrial growth now seems to have bumped up against constraints familiar in that other large continental and developing economy—China.

Output is being held down mainly because of shortages of coal, electric power and rail transport—infrastructure bottlenecks that exacerbate each other, are hard to tackle over such large distances and touch every sector of industry. In turn, they have contributed to a level of wholesale prices in December that is 20 per cent up on a year ago.

The additional external factor in this rate of inflation that creates immense social strains in such a low income country is the jump in oil prices. This also has been the principle cause of the sharp widening in the trade deficit for 1979-80 to about \$3bn.

Concern with these immediate problems risks deflecting Mrs. Gandhi's government from what should be long-term policy goals.

The coal and power industry, and the rail network both need better management and continuing high levels of investment. Exports as well as industrial output have suffered from their poor performance. The danger is that investment programmes could be shelved as part of overall public expenditure cuts in an attempt to curb the budget deficit and hence the pace of inflation.

Concern over the trade balance also risks undermining

After her electoral victory in January Mrs. Gandhi's main economic anxiety is to bring down India's rate of inflation. But her long-term goal should be to open up an economy that for too long has been protected against competitive pressures by expanding its overseas trade.

the policy of import liberalisation which was initiated by the Janata government. Its most beneficial impact has been to provide a measure of competition to domestic industry—particularly to capital goods manufacturers—and alleviate shortages of raw materials and capital goods. A liberal import policy is in line with the more open economy for which some of Mrs. Gandhi's advisers have been pressing.

It is also a touchstone of whether the Government will give its support to programmes enabling industry to modernise their equipment. Corporate profits have been buoyant lately and there are plenty of signs that the private sector would like to increase investment to meet past growth in demand.

But a return to restrictionist import policies would have an adverse effect. It would also encourage protectionist pressures by the industrialised nations.

Sharp rise

On the other side of the picture there are more signs of government support for a long-term programme of promoting exports. Export performance this year has been ragged, with traditional items in the first half of 1979-80 such as leather goods, marine products and jute recording a sharp rise in value terms.

Engineering goods exports fell by 21 per cent however affecting the problems of Indian industry as well as lack of sustained effort in major markets

such as the Middle East. Textile exports, though increasing have failed to utilise fully the available quotas to the EEC. Overall, a continuing hazard for Indian exporters is the threat of government restraints in order to divert products to the domestic market.

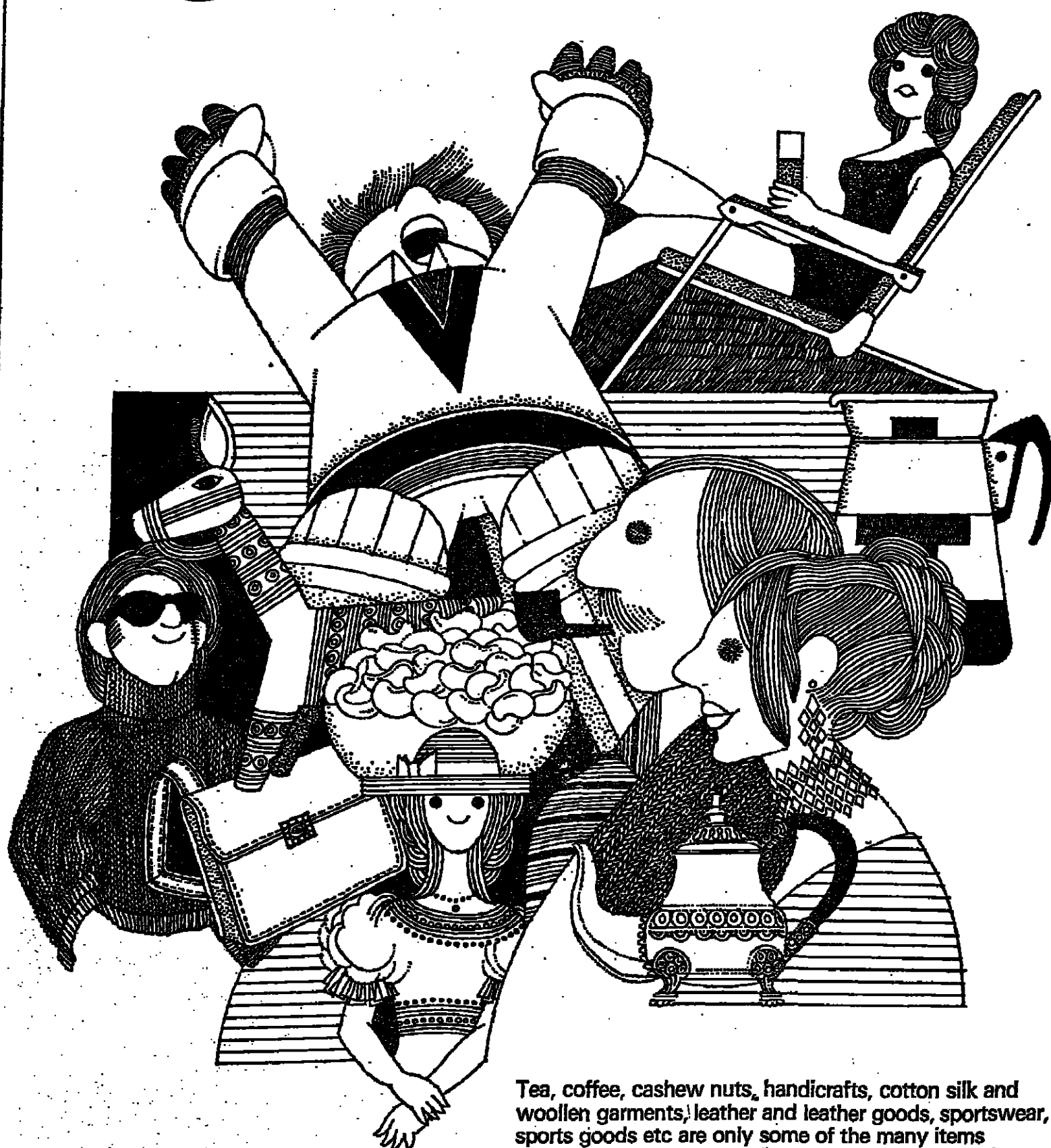
A long-term trade policy would have to take account of both the need for continuity as well as the need for both Indian industry and manufacturing exporters to be more specialised in what they manufacture and to which markets.

Anxiety over the need to curb inflation also threatens to reinforce the controls that have bedevilled Indian industry and which Mrs. Gandhi has the opportunity to reduce. The immediate pressure will be to continue with price controls. But through the licensing of new industries or expansion of existing ones, the rules about the size of industrial companies and the extent of foreign investment, successive governments have spun a cat's cradle of regulations which stifles initiative in both the private and public sector.

A great many companies have demonstrated their potential to produce efficiently, earn foreign exchange and create jobs if given the chance. A small number of state governments have also shown that they can achieve higher rates of economic growth given less control from Delhi. It would be sad if the pressures on Mrs. Gandhi to liberalise were checked by excessively cautious policies over inflation.

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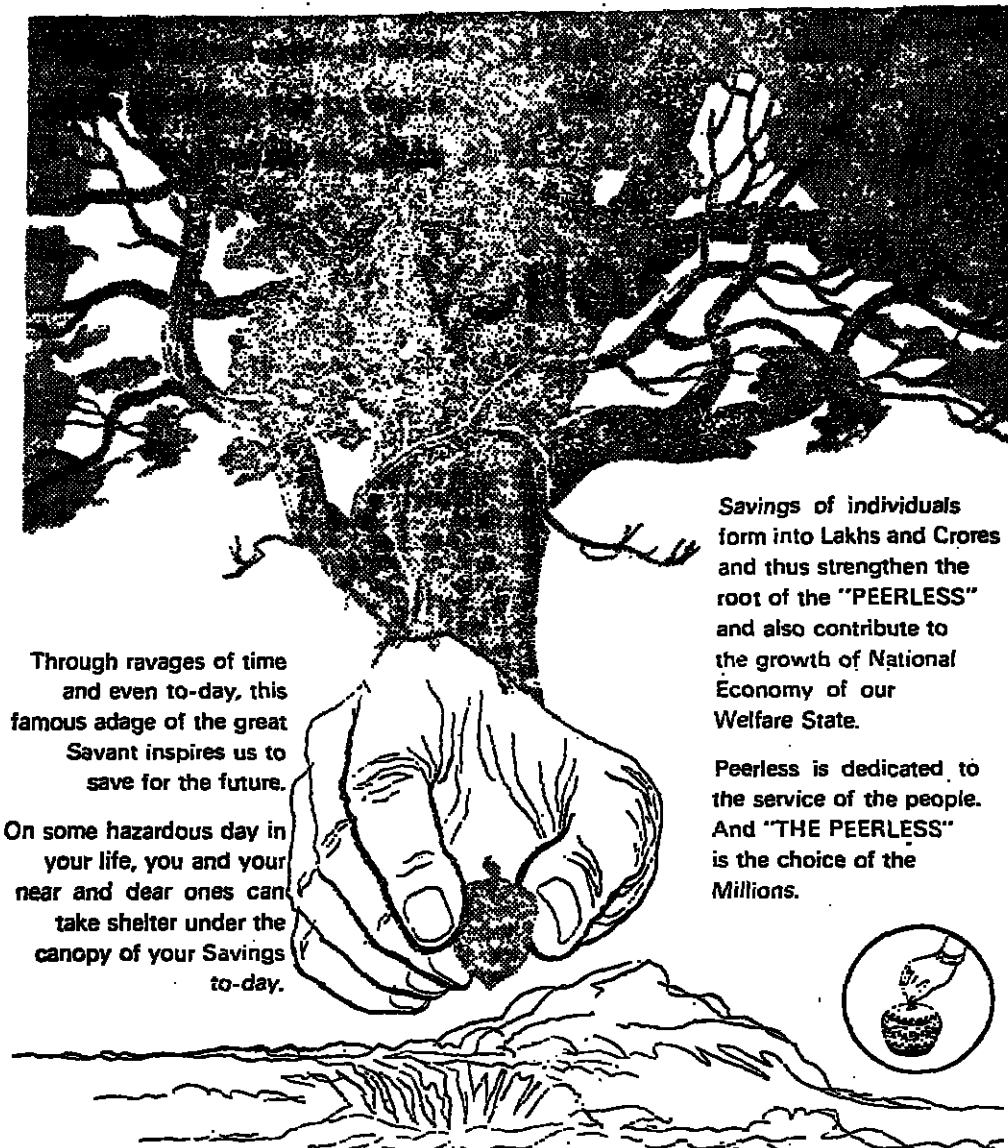


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ECONOMY

Need for strong measures to halt the drift

SOON AFTER she came to power in January, Mrs. Indira Gandhi spoke grimly about the burden of the appalling economic legacy she had inherited from the Janata and Lok Dal Governments of the previous three years. In her first broadcast the Prime Minister said that the "Janata Party has dissipated in just 30 months the solid economic, social and political infrastructure built by the Congress over 30 years."

The charge has obvious political undertones but Mrs. Gandhi was exaggerating only slightly. The economy has indeed run into a bad patch once again.

The unusual spell of four good monsoon years ended in 1979 when a severe drought hit most parts of the country and proved an immediate reminder of the economy's continued dependence on rain. It is now accepted that 1979-80 will be a year of "negative growth," and that Gross National Product will actually fall compared with the previous year, reversing the trend of an average growth rate of around 4 per cent in the past few years.

The decline, according to the National Council of Applied Economic Research, could be as much as 4 per cent. Such a serious setback was last registered in 1973-74, when the economic growth slipped by 1.1 per cent, and is in sharp contrast to the (now redundant) sixth five year plan's postulated annual growth rate of 4.7 per cent. The stagnation is due to a fall in agricultural production directly attributable to the drought—foodgrain output is expected to fall by about 8 per cent to about 116 million tonnes—as well as the possible decline of industrial production, a rare but unpleasant combination.

The crisis, for that is what it is, is exacerbated by the fact that India has rapidly shed its reputation for being among the few countries to have contained inflation. Wholesale prices in 1979 rose by more than 20 per cent, causing social tensions that the Government is finding difficult to handle. Part of the inflation was imported, of course, because of the high prices of crude oil which are largely responsible for the record trade deficit of Rs 20bn contemplated

for 1979-80. But the inflation was, as economists acknowledge, also due to mismanagement of the economy; this really means the absence of effective Government in the past three years. Dr. Raj Krishna, a member of the now dissolved Planning Commission, says that the current inflation is due to three causes: the high budgetary deficit, estimated by him to be roughly Rs 20bn in 1979-80, the rise in money supply by 18 per cent; and the shortage of such essential commodities as sugar, edible oils and vegetables as a result of mismanagement of supply during the year.

Other ominous signs on the horizon are the decline in the stocks of foodgrains, which had reached around 20m tonnes in the past three years and which will inevitably fall to keep the public distribution system going in a period of low production.

India's growing foreign exchange reserves are now past their peak and the current year will actually show a fall in contrast to the rise of Rs 17bn in 1977-78 and Rs 8bn in 1978-79. They are still impressive at around Rs 53bn but the burden of oil imports is finally beginning to tell despite the continued buoyancy of remittances from Indians abroad. These have contributed about Rs 1.5bn monthly to the reserves for the past four years.

Cushions

The food stocks and foreign exchange reserves were considered to be inflationary because of the increase in money supply and demand they provoked without a matching supply of goods. Yet they have been used as cushions on which the Government could always fall. They continue to be so, and indeed many officials and economists feel they should have been run down a long time ago.

But they are falling now not because they have been made of consciously as part of a deliberate economic plan but because of the drought and rising world prices. This underscores the drift of the economy to which Mrs. Gandhi rightly points and must give cause for concern, especially now that the

new Government has shown little sign that it means to tackle the economic problems as speedily as the situation demands.

Yet all is not unmitigated gloom. The current crisis comes against a background of a steady rise in national income in the 1970s despite three disastrous droughts, a costly war and a tenfold rise in crude oil import prices. A couple of years ago there was actually a trade surplus, albeit of a modest Rs 7bn.

India has built up a strong industrial base that enables it to compete successfully for turnkey projects abroad. In the countryside the area under irrigation is increasing at about 2.5m hectares, although the target of adding 17m by 1984 is unlikely to be achieved. New generating capacity reached a level of 3,000 MW last year.

Even though foreign exchange reserves are declining, aid disbursement is higher than ever before and remittances from Indians abroad show no sign of slowing down. Mrs. Gandhi rightly complains of a bad economic legacy but the Indian economy always slows down after a drought and it does show signs of basic resilience. Another drought would be disastrous but the basic ingredients of being able to tackle a critical situation are present, and given the political will, the economy could resume its upward trend.

It also has to be said to the credit of the Janata Government that it initiated schemes of development that strike at the root of unemployment, India's basic and chronic problem. There are now in operation such schemes as "Food for Work," an integrated rural development programme and "Antyodaya," which have the potential of catering for the needs of the heavily unemployed and underemployed people in the villages. So far, however, the problem remains despite the claim that the new programmes absorb about 5m out of the 6.5m people who join the labour force every year. Unemployment is now estimated at 25m.

Unemployment cannot be diminished until the various factors that have contributed to a slump in industrial production are tackled. The drought has

brought into the open the progressive weakening of the economic infrastructure.

Today the country faces a triple constraint on growth. Thermal power stations set up in the past two decades have failed to work at more than 45 to 50 per cent of capacity in the past decade. The railways are no longer able to meet the growing needs of an increasingly interdependent economy. The coal industry has failed to increase the supply of this vital energy source.

All these infrastructure industries are in the public sector, whose malaise is evident despite the overall profit Government units have shown — profits which are expected, however, to show a sharp fall in 1979-80.

Debate

There is debate over the level of investment that should be maintained. Unfortunately, because of the Government's preoccupation with politics, the debate will not lead to speedy decisions since the jettisoned sixth five-year plan of the Janata government will take at least a year to replace. The plan, now obsolete in any case because of continuing inflation, envisaged a total public sector investment in the five-year period ending 1983 of Rs 710,000m.

To end the infrastructure crisis, says Dr. Raj Krishna, such investments are essential and any cuts would be "tragic." The plan, he says, "provides for necessary minimum infrastructure investment in crude oil, railways, shipping, aviation, steel, coal, power, etc. Any reduction in this investment would only aggravate shortages of these vital inputs a few years from now. Therefore it would be folly to cut this minimum investment."

The savings rate in India has already exceeded 20 per cent and investment has fallen behind slightly. The problem of increasing investments in the public sector—and this heavily influences investment and growth in the private sector—comes up against the undoubted need to check inflationary forces.

Some economists feel that this can be accomplished by checking the high budgetary deficit

(estimated at Rs 135m in 1979-80 but is certain to be much higher). This is not impossible since there is substantial scope for economy in areas like defence expenditure and subsidies to fertilisers and exports. The functioning of public sector enterprises can be improved so that their losses are reduced. Prohibition, the introduction of which by Mr. Morarji Desai has led to heavy revenue losses, can surely be shed.

The Government has announced that it will give priority to anti-inflationary measures but its only economic pronouncements are that it will revive the ambiguous and politically inspired twenty-point programme that Mrs. Gandhi introduced during her emergency rule. Fortunately, a Cabinet committee has been formed to tackle specifically the infrastructural bottlenecks. The Prime Minister has also announced that on the industrial front efforts will be made to increase production as soon as possible through better utilisation of existing capacity, improvement of the poor labour relations that have held back production in all sectors and better management, especially of public sector undertakings.

So far these are just statements of intent. Things will not be easy for the Government. The current economic scene is replete with contradictions — vast but unused resources, sophisticated machinery not made fully productive and domestic investment lagging behind domestic savings.

The Government's difficulties are increased by the realisation that the India of the 1980s is not the India of the 1950s. Expectations are higher. The people want more clothing, better housing, a more varied diet, efficient public services and generally a better life. With the country's considerable assets in the form of land, industry and manpower, these are not beyond reach. But it needs boldness and courage on the part of the government as well as positive signs that it means to give priority to economic policy — sad development rather than the lip service that has been evident so far.

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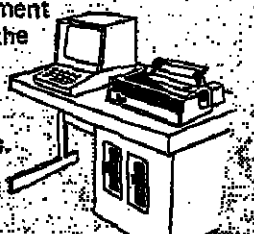
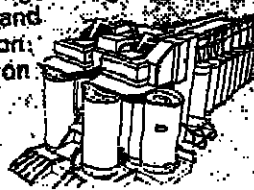
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Industrial strife gives way to peace

MRS. INDIRA GANDHI'S general election victory coincided with a startling slump in industrial strife—perhaps no surprise in view of her stern handling of labour disputes during the emergency period.

But few industrialists are yet confident that a path of industrial tranquillity lies ahead, if only because they have just emerged from one of the most turbulent years on record.

More than 40m man-days were lost in 1979 as a result of strikes, lock outs or other disputes. This contrasts with 12.5m days lost in 1978 (during the Emergency) and is on a par with 1974, which was India's worst-ever year for industrial strife: 40.2m man-days were lost.

In her inaugural speech after the January elections Mrs. Gandhi claimed that half of India's installed industrial capacity had stood idle in 1979.

Industrial output was the victim of more strikes and lock outs. Management complained that still more damage was inflicted through go-slows, work-to-rules, "gheraos" or lock-ins, malingering, clock-watching or petty sabotage.

The year 1979 offers a litany of costly and often pointless strikes across the whole range of Indian industry. Bank workers at Grindlays struck for 92 days, insisting that their minimum bonus be raised from 8.3 per cent and that there must be a veto on mechanisation which cost jobs. They returned to work without achieving either of their objectives.

Other banks nationwide were affected by strikes for about 200 days, and cheques were cleared on just 150 days.

Capitulated

Workers at Motor Industries Company (MICO) in Bangalore went on strike after management sacked or suspended about 40 men. When the company capitulated 85 days later, it had lost an estimated Rs 180m in output while the workers had lost Rs 20m in wages.

production were lost.

At Calcutta port, strikes or other disputes brought activity to a halt for 150 days, and production was affected on another 70 days. Exports worth millions of rupees were held up, at one stage for three months.

Labour conflict often had very little to do with demands for better wages or for improved working conditions. They were often associated with India's idiosyncratic trade union structure, which is closely linked to national party politics.

Irrational

With rapidly rising population, the fear of increasing joblessness is acute and has resulted in a strong and sometimes irrational hostility towards any capital-intensive technologies. At the same time, management in some sectors is clamouring for higher productivity, so the two sides find themselves on a collision course.

Industrial stagnation, often the direct result of power cuts and the shortage of essential inputs like coal, has made layoffs and retrenchment endemic in some parts of the country. This inevitably proves demoralising for workers, who feel themselves under constant threat, and has soured industrial relations.

In some respects, India still has a pre-industrial labour force. Out of a total workforce estimated at 180m just 31m work in the "organised" industrial sector. There is a great rift between these workers, and those working in agriculture, or in the "unorganised" sector—factories not regulated by law, usually employing fewer than ten people.

Coal miners, railwaymen, steel and power workers and similar workers in the organised sector can expect income of at least Rs 700 a month. This may seem small enough, but the average for the economy as a whole is just Rs 5 a day—about Rs 100 a month.

An attempt a year ago set Rs 4 a day as a minimum wage was rejected as impractical. At the same time, proposals to set a minimum working age of 15 years as an attempt to end the exploitation of child labour was abandoned. An estimated 16.5m children aged between four and 15 are working in the industry's unorganised sector.

One foreign economist claimed: "India still has to reach the point where it has a

real industrial labour force—once that is reconciled to turning up for work at the same time, five days a week, and working for eight hours."

The whole notion of a stable industrial labour force is something which has had to be formed only since Independence in many parts of the country.

This to some extent explains the "gandhism," or gangsterism, that is rife in certain areas—particularly in the tribal areas of the Bihar coalfields. It explains too the sabotage to machinery which often accompanies strike action.

It also in part explains widespread absenteeism. Mr. Krishna Ramachandra Kulkarni, leader of the main union at Bombay port, admits that absenteeism averages 20 per cent and rises to 30 per cent in April, May and June—the peak period for planting crops in the villages.

A similar pattern is reported

in the coalfields of Bihar and West Bengal. Coal India estimates that almost 5m tonnes of coal output was lost between April 1979 and January 1980 as a result of absenteeism. If a worker asks for leave to attend a family wedding, or funeral, or to look after an ailing relative, the request is never rejected.

During the past year of political upheaval in Delhi, inter-union rivalries have wreaked havoc in some industries. In West Bengal, for example, where a Marxist government is in power, the unions aligned to the Communist Party-Marxist (CPM) grouped under the Centre for Indian Trade Unions (CITU) have held greatest sway.

But once it became clear that Mrs. Indira Gandhi's Congress Party was in the ascendant, on the union aligned to her party (mainly the Indian National Trade Union Congress—INTUC)

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Dissident States pose unruly challenge

THE RESULTS of the January parliamentary elections were as unequivocal as in 1977, so Mrs. Gandhi should feel reasonably sure of an unchallenged innings for at least the next five years.

Since she has a comfortable two-thirds majority in the Lok Sabha (lower house of parliament), the people should also reasonably expect stable and consistent policies from the Government for the next few years because electoral compulsions to cater to the electorate should not arise for some time. Yet there is uncertainty about this.

It is early to judge Mrs. Gandhi yet. Her preoccupations so far have been either political or with foreign policy. This is because of the situation in the country, where she found a majority of the 22 States arrayed against her, and that on her borders because of Afghanistan.

Her preoccupations led to an unceremonious bundling out of power of the parties that controlled nine non-Congress States, and elections to these are to be held in June. For this reason, Mrs. Gandhi's first Budget has also been postponed. For some time, therefore, the country will not know what the long-term (or, for that matter, the short-term) policies of the Government will be.

Legacy

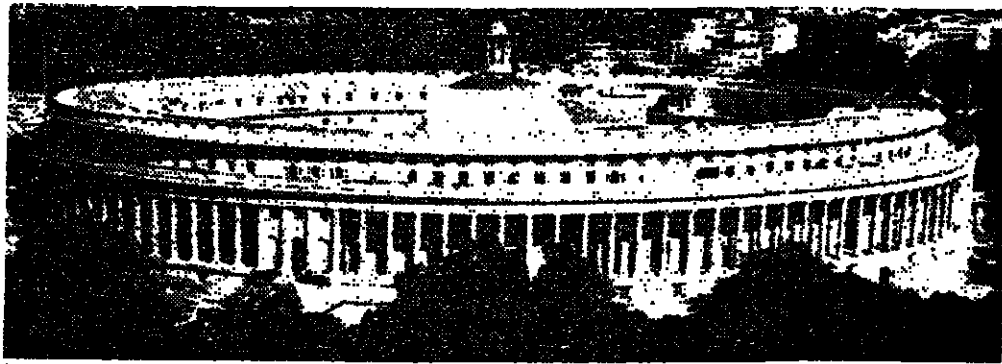
This must give cause for concern. Mrs. Gandhi, in the past, has acted when she feels her own position is in peril. There is no immediate danger to her and so she does not, despite her constant criticism of her predecessors for leaving her an undoubted bad economic legacy, feel the need to take action quickly to tackle the critical economic situation in the country.

It is unlikely that any major decision will be taken until Mrs. Gandhi is sure that the States—nine of the major ones of which have no Government of their own—are behind her. This will be in June and so Mrs. Gandhi will have let six valuable months slip by.

Yet one must not be too harsh, for politics has its own compulsions. Since India has opted for a federal Government and Mrs. Gandhi insists that the central administration must be strong, she must be in a position to ensure that her policies are carried out. With a majority of the States opposed to her, she would have found it difficult to have them carry out the central government's writ.

In fact, in dismissing the non-Congress States, Mrs. Gandhi did no more than the Janata Government in 1977. The nine States placed under President's Rule last month (February) are not the same as those dismissed by Mr. Morarji Desai in 1977. They include Tamil Nadu in the south, whereas in the past action was taken only in the north.

They do not include West Bengal where the Marxists have demonstrated their invincibility even though Mrs. Gandhi, like



The Federal Parliament building in New Delhi

Mr. Desai, must have been tempted to use the hatchet there.

Since the precedent was set by her opponents, both the justification for Mrs. Gandhi's step and its legality cannot be challenged. In any case, few tears need be shed since the State Governments in power for the past three years were as inactive as that at the centre especially in the key States of Uttar Pradesh and Bihar. The precedent has now been established that the results of Parliamentary elections, if they are as sweeping as in 1977 and 1980, must supersede the earlier judgment of the electorate in the States if this proves to be different.

Both Mrs. Gandhi and her father rarely hesitated to remove a recalcitrant chief Minister even when they belonged to their own party. The constitutional provision for dismissal of State Governments and imposition of President's Rule (which means, in effect, direct rule from New Delhi) has been resorted to frequently.

It went into abeyance during the three-year spell that Mrs. Gandhi was out of power since Mr. Desai and Janata believed that the States should have more freedom to go their several ways. The experiment was not entirely successful since the federal structure came under such severe strain it seemed that dormant tendencies for secession would become active (particularly in the north-east where they are again active in Assam).

The States, moreover, made such demands for autonomy, particularly for financial autonomy, that even Mr. Desai felt compelled to call them sharply to order. He refused to accede to their demands for more resources and powers other than those granted under the Constitution or by statutory bodies (such as the quinquennial Finance Commission) appointed under its provisions.

The demands were such that they all but paralysed the planning machinery; the States refused to consider the draft of the Sixth Five-Year Plan formulated by the Planning Commission until their demands were considered. Such was their insistence that the Plan has never been approved.

The lesson to be drawn is that the Indian federal model does not really function if there are in power in the States political parties that are eager and willing to challenge the

central government. This can halt normal governmental processes even if there are only one or two such States. Indeed, Mr. Desai was stalled really by the (Sikh) Akali party in Punjab and the Marxists in West Bengal, the two States that were to the fore in the demand for more autonomy, even though they were the Janata's allies.

Will the States allow Mrs. Gandhi to enforce the supremacy of the central government? By dismissing the nine non-Congress Governments in the States Mrs. Gandhi has indicated her determination to ensure this, even though there is no guarantee that the electorate will vote the Congress Party in when elections are held in June (State elections need not necessarily follow the pattern of parliamentary elections, especially when, unexpectedly for Mrs. Gandhi, the intervening period is as much as six months).

If the Congress Party does not win in even one or two States, Mrs. Gandhi is in for trouble. Taken with the Marxists who have not been touched in West Bengal and Tripura, even one or two additional obstreperous States could put reins on Mrs. Gandhi.

Resolved

This is unlikely to be concentrated, as it was during Mr. Desai's tenure as Prime Minister, on demands for more fiscal autonomy although the Marxists can be expected to keep up the chant on this. This question was resolved towards the end of Mr. Desai's Prime Ministership when he came down firmly and asserted the supremacy of the Centre. But over the years there have developed many other interests and groups articulating them that impose strains on the Indian system.

A major example, and one that covers the country, is the stirring in the villages and among the country's millions of poor farmers who want to assert their rights. Politicians find them ready-made material for their own purposes.

Even more important is maintenance of law and order, a subject allotted to the States by the Constitution but one in which the Central Government cannot but have a keen interest. Discipline among the administration personnel and the police has been seriously eroded in the past few years, as agitation by the police forces in the States last year showed. But the

heartening fact is that the elections were, nevertheless, carried out peacefully and show that the structure is basically sound.

Mrs. Gandhi has announced that law and order are high on her list of priorities, even more than settling the economy going again. This is undoubtedly because she is aware that progress in the first has a bearing on the other. Indeed, for both she needs the co-operation of the States.

Spectrum

Another development is the consolidation of castes and communities, particularly in the Hindi-speaking States, although the Parliamentary elections results showed this has not taken place to the extent many intellectuals thought it had. Yet it is also true that parties like the Lok Dal, led by the "Jat" (farmer) leader, Mr. Charan Singh, is closely identified with backward classes, while the bulk of what remains of the Janata Party draws its support from a broader spectrum of castes and classes.

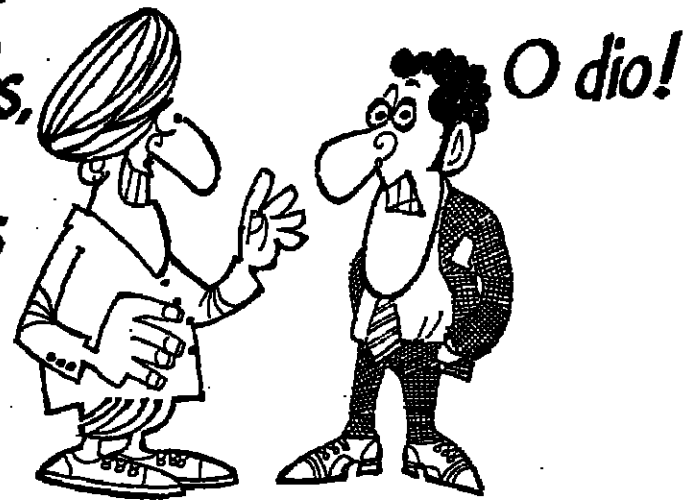
Since these are forces not quite as strong as thought prior to the Parliamentary elections, they can be checked if Mrs. Gandhi takes note of the reasons for the development of the pressure groups. If the coming State elections show that the Lok Dal and the Janata are not spent forces, she will need to act quickly, especially if they win large blocs of seats in the legislatures.

However, it is now evident that the ruling parties in the States cannot make extravagant demands on the central government in the manner they have in the past without frustrating their purpose or coming into collision with it. In fact, Mrs. Gandhi's reputation for seeking to act firmly on behalf of the central government will probably itself have a deterrent effect.

This may happen even in West Bengal where the Marxists have voiced fears that Mrs. Gandhi is just waiting for an excuse to oust them, so they have to enforce discipline among their workers to avoid giving provocation to her. It remains to be seen how the Prime Minister will control other manifestations of parochialism; there is little doubt that she needs to tread carefully if the federal structure is not to be excessively strained.

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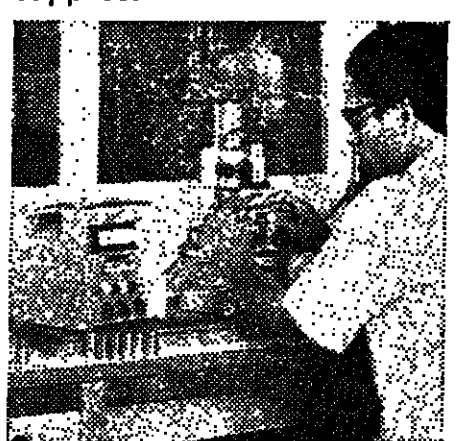
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Strife

CONTINUED FROM PREVIOUS PAGE

began to foment trouble. They could be confident of support from Congress politicians, just as CITU unions could depend on the CPM.

Across the country, similar power play was rampant, and as these unions vied for support, so industry was the ultimate casualty.

With Mrs. Gandhi now firmly unseated in Delhi, one would expect this rivalry to subside: the structure of patronage has been fixed. Only in areas like West Bengal and Kerala, where the Communist parties have kept control of federal seats at the same time as running state Government, can conflict be expected to continue unchecked.

Even trade union leaders despair at the consequences of such conflict. Mr. Kulkarni, who leads the predominant Hind Mazdoor Sabha (HMS) union in Bombay, port complained: "Many strikes take place only because of undue interference by the Government or opposition parties, every political party tries to control labour, often with chaotic consequences."

"I believe that labour should create its own lobby. Workers should be given the right to elect leaders through secret ballot, and whichever union gains a majority vote should be regarded as the sole bargaining agent for the whole work force."

Mr. Subrata Ray, director of planning and research at Bombay port, confessed: "We are singularly lucky in not having a broad multiplicity of unions here."

Calcutta port does not share the same luck. Inter-union rivalry is in large part responsible for the port's appalling work record last year. While it lost more than 100,000 man-days, Bombay lost 44,000.

Mr. D. H. Pal Panandikar, deputy secretary-general of the Federation of Indian Chambers



An attempt to end the exploitation of child labour has been abandoned. Here, villagers attend a local centre operating as part of India's family planning programme

of Commerce and Industry (FICCI), said: "It is not wage demands as such that are a problem for industrialists. You find that in every industry you have so many unions, each competing against the other. As they war among themselves, so industry is paralysed."

A similarly severe problem is resistance to mechanisation. Mr. Monoranjan Roy, leader of the Communist Centre of Indian Trade Unions (CITU) in Calcutta, complained: "Here in West Bengal, the main pre-empt of unemployment and retrenchment, of setting up machinery, reducing the employment potential of industry as a whole."

This fear of unemployment—in West Bengal an estimated 6m—10 per cent of the population, are without work of any kind—explains why, at Bombay port, a fertiliser dock with four high-capacity 13-tonne cranes worth a total Rs 11m has been lying idle for three years—even

though the port is hopelessly congested.

It explains why more than 80 per cent of India's coal is still manually extracted in bord and pillar mines. It explains why bank cheques and most Government statistics are still dealt with by hand.

Such practices inevitably lead to very low productivity at a time when most industrialists realise they must improve productivity simply in order to survive.

The managing director of a major international electrical company with its headquarters in Calcutta explained: "Our labour relations problems are peculiar in that they are concentrated completely on improving productivity."

"We aim to double output in the next five years, but to do that we are looking for a doubling or trebling of productivity. We are prepared to pay well, but only in return for higher output."

"We simply have to convince workers that it's in their own interests to adopt more sophisticated technologies."

Workers point out that the companies' plans involve pegging the work-force at the present level of 4,000. With more people coming onto the job market every year, they are worried how their children will find jobs if such growth policies prevail.

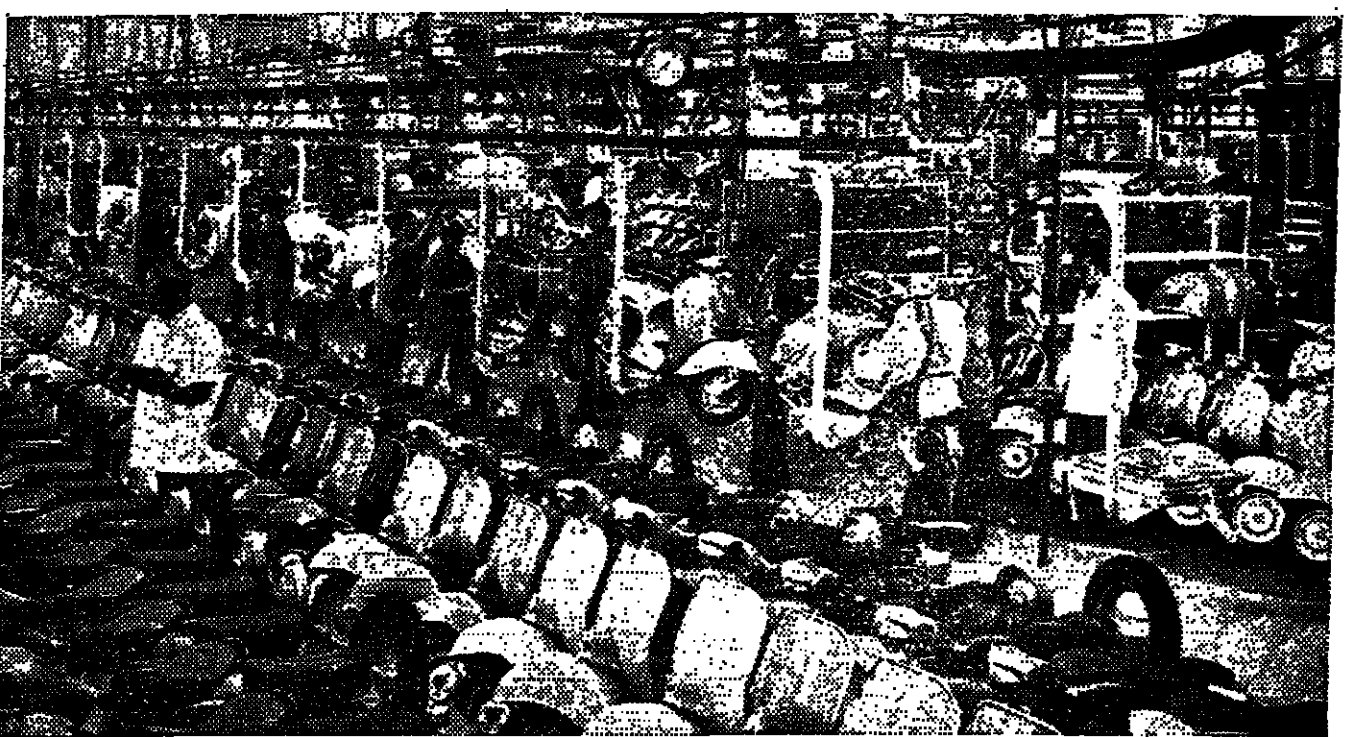
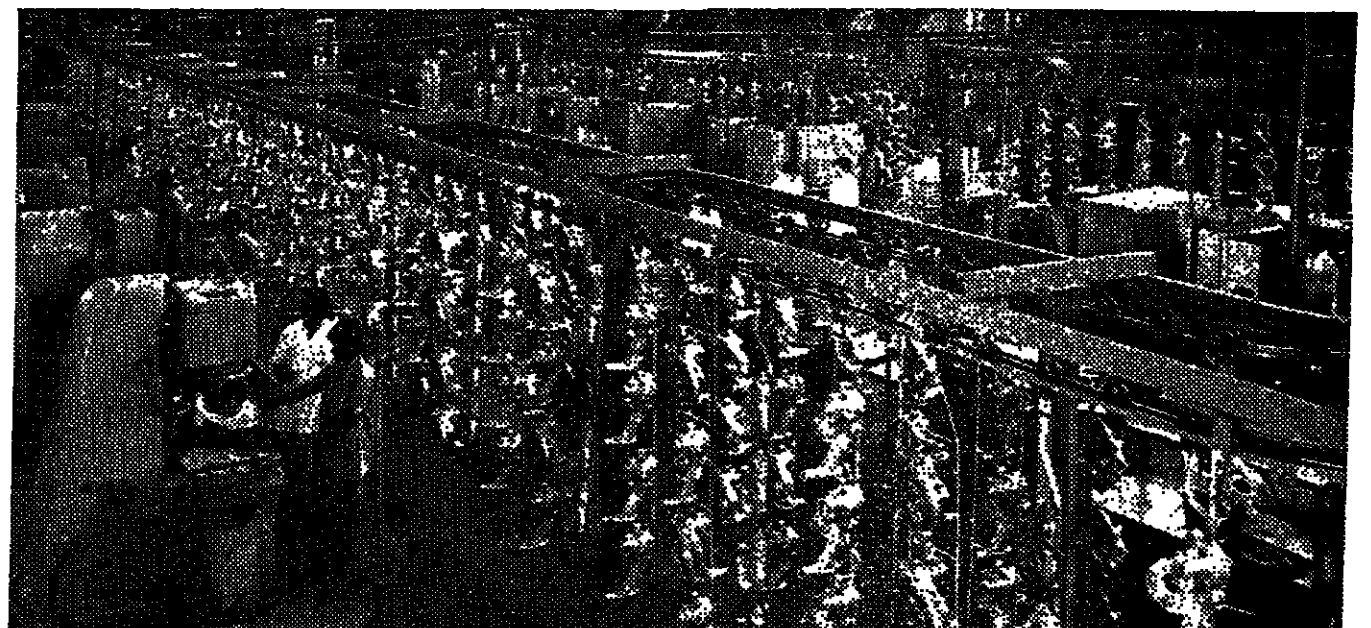
An industrial relations Bill was drawn up by the now ousted Janata government. Opposed by employers and workers alike, the Bill has died a natural death. But a new policy is urgently needed. The new Congress government is drawing up plans.

In the meanwhile, the industrial atmosphere has improved since the agreement in November to give railway workers a productivity bonus worth Rs 350m—about 15 days' wages per man. The agreement is a productivity deal in the genuine sense, and may set a pattern for future wage deals.

At the same time, the Government will be under pressure to encourage some kind of rationalisation of union structures, to devise labour courts or tribunals for arbitration purposes, to curb violence and sabotage in strikes and to establish a wages policy, possibly involving index-linked wage deals.

But for the moment, industrial peace prevails. As Mrs. Gandhi makes the most of her post-electoral honeymoon, so workers are no doubt thinking back to what the CITU leader Mr. Monoranjan Roy called the "semi-fascist terror" of the 1975-77 Emergency period. As they pause for thought—and for breath—at the end of a year of terrible conflict, the new Congress government must dearly hope that the peace will last.

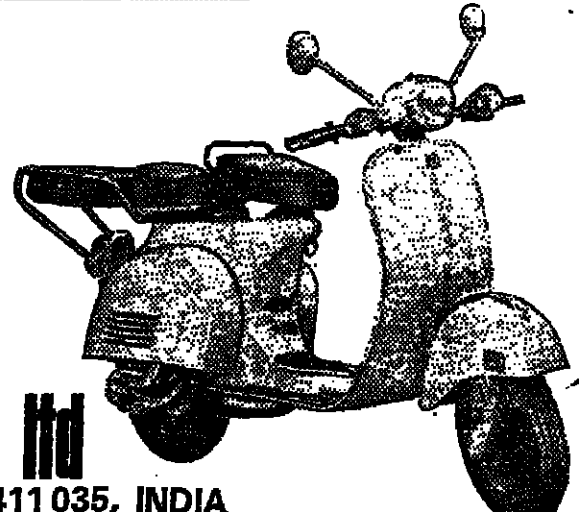
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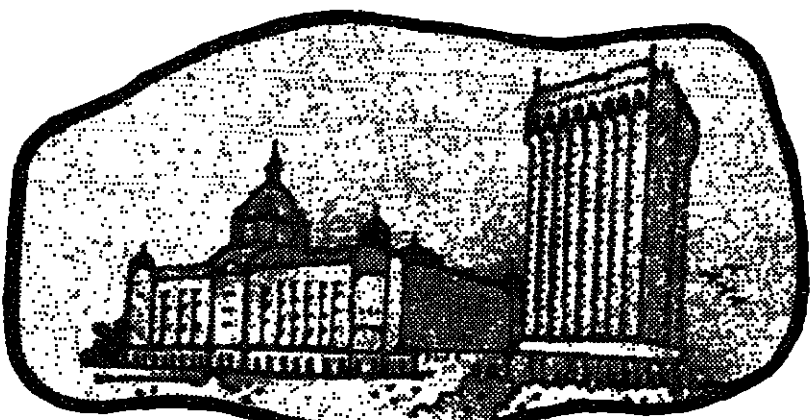
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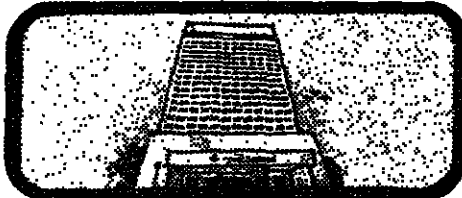
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TRADE

Alarm bells as deficit gets bigger and bigger

INDIA'S FOREIGN trade deficit in the current financial year ending this month will be the heaviest ever; next year's will be even worse. Exactly how big the deficits will be is still a matter for speculation, with different figures being pulled out of different hats in New Delhi.

But certainly the alarm bells are ringing because it seems likely that this year's deficit will not be covered by earnings from tourism, remittances from abroad and aid, and that India will have to draw on its foreign exchange reserves. Next year's prospects are even gloomier.

As to the 1979-80 trade deficit, Mr. Prasad Kumar Mukherjee, the Commerce Minister, said recently that he feared "the figure may cross Rs 20bn (\$2.5bn) by the end of the present fiscal year." The National Council of Applied Economic Research estimates the same sort of figure, but the Indian Chamber of Commerce goes as high as Rs 30bn (\$3.75bn). Foreign economists estimate a deficit this year of about \$3bn, rising to \$4bn in 1980-81.

In the January issue of its quarterly journal the National Council of Applied Economic Research gave the following reasons for the growing trade deficit: "Increasing import price of petroleum crude, liberalised import policy pursued by the Government since 1977, inadequate increase in domestic crude production, protectionist policy of developed countries, and inadequate growth in India's industrial output and, thus, exportable surplus."

Such is also the explanation favoured in Government offices in New Delhi—in effect a mixture of unfavourable external circumstances like higher oil prices and protection in the West along with political turmoil at home setting up an unfavourable chain reaction.

The last point is taken up with vehemence by Indian industrialists and businessmen from Calcutta to Faridabad and from Ludhiana to Bombay and Poona. "How can we export," they exclaim, "when we are denied power, when our goods move slowly from the factory to the docks, and are then delayed at the port by industrial unrest?"

Comical

Stories which would be savagely comical were they not a sad indication of India in 1980 abound — power stations carting coal a thousand miles across the country by lorry, as and when they can get the diesel fuel for the lorries; jute and tea shipments in Calcutta held up for more than a hundred days a year because one group or other of workers is dissatisfied.

"One hundred and thirty-five workers out of the 30,000 employed there held us up completely," said one company director; the big industrial group waiting for imports and finding that the ship had docked and then gone away again because of the slow unloading, and when the cargo did land a special "levy of Rs 200 a wagon had to be paid to persuade the railway workers to send the goods out of the port area."

To such businessmen there is a simple prescription and Mrs. Indira Gandhi is good news because she will supply it: "Discipline and let us get people working." One senior director even suggested: "A couple of battalions of the border security force will set things right. Possibly a few people might get shot, but discipline has to be restored. Let the power flow, let the coal move, let industry produce, let the railways work and the ports run smoothly and we can get the country on the move."

Other economic analysts able to take a more detached view than businessmen who have to bear the brunt of delays and inefficiencies suggest that a much wider action programme is needed.

The National Council recommends the following measures: "Maximisation of exports, selective approach to imports, intensified search for new indigenous sources of fossil fuels, increase in domestic production of edible oils, and measures to attract foreign exchange remittances from abroad."

It warns: "With the stagnation in industrial output it is unlikely that the country will be able even to maintain the moderate 4.8 per cent rate of export growth achieved in April - October 1979. Efforts to step up exports require not only an overall improvement in industrial output but also the capturing of new world markets, special incentives in the form of raw material and import entitlement quotas, and minimisation of export delays as a result of congestion and strikes at ports."

Sharper

The indications are that there will be no radical break with the past, but there will be an attempt to curb imports and promote exports within a sharper management framework.

Mr. Mukherjee said recently that India's import policy might be changed. It could not remain liberal, he said, to the extent of unnecessarily whittling down our foreign reserves. Nor can we give a low priority to exports, the growth rate of which reached a nadir during the Janata rule. But he turned down any sweeping changes such as greater involvement of multinationals or large changes in industrial licensing policy.

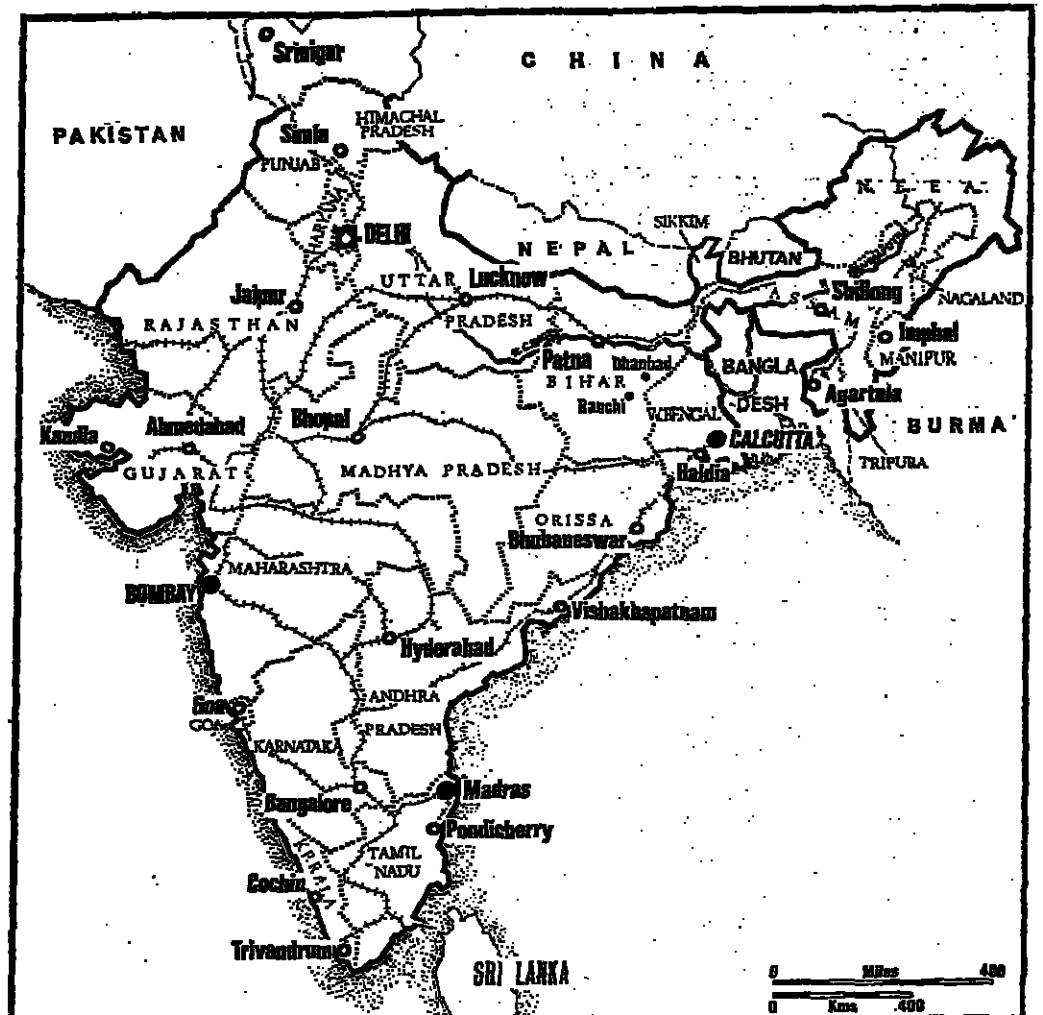
The pragmatic approach to trade certainly seems to be the one recommended by Indian Commerce Ministry officials. It worked before and probably fits in with Mrs. Gandhi's style of operation. Crisis committees can sit with representatives from each Ministry, and decide which exports should be encouraged—backed if necessary by a battery of incentives; which imports should be curbed and which allowed.

There is scope for such a technique. Last time sugar and silver helped to close the trade gap. Today vigorous export of those particular commodities would cause political problems, but there are others which could be chosen. Export of groundnuts, today banned to reserve them for oil seed, could make a few hundred million rupees from the international cocktail market. Giving priority assurance of power and shipping space to engineering exports should help them towards the target of Rs 10bn, if not by 1980-81 then by the following year. Such exports have been especially badly hit by the present crisis and are likely to fall below last year's figure of Rs 7bn.

On the import side there is also room for improvement. Large imports of edible oils, costing about Rs 8bn to Rs 9bn could almost certainly be reduced, as could imports of fertilisers, aluminium, steel and cement. These items account for 20 per cent of the growth in dollar terms of imports. In addition, careful spotting and selection of export markets would lead to continuous liberalisation of imports of goods—inputs for synthetic textiles would be one area—which would lead to higher export earnings.

But what to do with the largest item on the import bill is more difficult. India's oil bill has shot up from Rs 2bn in 1972 to Rs 30bn in the current year, which is between 45 and 50 per cent of export earnings. Next year oil will cost about Rs 45bn assuming no further increase in price and that demand for oil will increase by 10 per cent. The country has increased its own oil production and is intensifying efforts to find domestic sources. Imports today are 60 per cent of India's oil needs, against 85 per cent immediately after independence.

Domestic production is expected to reach 17m tonnes this year, compared to 12m last year. But with oil needs for the year 2000 estimated at 60m tonnes,



of which domestic production would be about 24m, the Government faces a dilemma. If in terms of the last quarter of the 20th-century today is an era of cheap oil, it may be better to conserve as much as possible of domestic supplies for the day of expensive oil. Uncertainty about oil and the size of the deficit it might fuel has led some economists to urge a departure from India's traditional limited idea of seeing exports as a means of paying for imports or as a temporary vent for excess production. Instead, such commentators urge, exports should be a target and a means of stimulating economic growth. They should even be made profitable. The tendency has been for the government to stay in and impose additional duties when it looks as if an exporter might make a windfall profit; this happened at the end of February when a duty of Rs 1,000 a tonne was placed on hessian exports. This policy has encouraged producers to rely on the safer and more profitable home market.

Touting industry, and improving efficiency are reasons why the World Bank is backing the idea of export-led growth for India. In its world development report 1979 the Bank had some specific remarks about the dangers of import substitution imposing high costs on overall economic development: "Even in larger economies such as Brazil (at least until 1965), India, Mexico and Turkey, the prolonged use of protective measures has contributed to the development of high-cost inefficient industries. Moreover, an important corollary of the protection afforded to manufacturing is its disincentive effect on agricultural production. Import substitution policies have tended to limit agricultural growth, and hence domestic demand for manufactured goods, while simultaneously keeping industrial production dependent on internal purchasing power."

Perspective

This is the problem—that a switch to a regime dedicated to open trade would fly in the face of the policies of 30 years, and not just trade but industry and the whole economy. The perspective in New Delhi still seems to be inward-looking and indeed remarkably lacking in self-confidence for such a big country and one which sees itself as a leader of the developing world and an industrially sophisticated nation.

Officials, experts and businessmen alike stress the dangers of trade in a climate of growing protectionism. This is despite evidence collected by the World Bank that the strong trading nations had managed to deal with protectionism best. Certainly South Korea's textile exports of \$3.8bn are a better advertisement than India's \$450m. Though India moans about the closing of markets to

it, the reply of the EEC is that in most areas India has not fulfilled its quotas.

The World Bank report had some other pertinent comments on the value of trade. Countries, it said, which had "used foreign trade opportunities to capitalise on natural advantages, such as their location and plentiful supplies of cheap labour, or on acquired advantages such as skills and technical capabilities, have developed more quickly and avoided cyclical foreign exchange crises more easily than similarly endowed countries that have excluded foreign competition and protected domestic production beyond the initial creation of an industrial base."

But in New Delhi the senior officials and the businessmen continue to talk of India as "the continental economy. So

can you be surprised that our exports are only seven per cent of GNP, the same proportion as in the U.S." Another favourite expression is: "We have this vast home market to satisfy first."

This really is an Alice in Wonderland world—when per capita income is still about \$150; when growth this year will be negative, when power and production is constantly disrupted; when the annual addition to the labour force of 5.5m only 550,000, or 10 per cent, gain employment in the organised sector (including mines, manufacturing, utilities, public services and major trade and transport organisations); when 48 per cent of the rural people and 41 per cent of the urban dwellers—290m Indians—live below the poverty line.

—Kevin Rafferty

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DIRECTION OF TRADE

		(percentage shares)			
		1950-51	1960-67	1970-71	1977-78
Africa	Exports	9.7	5.3	5.4	5.1
	Imports	13.0	4.6	8.0	4.4
U.S.	Exports	18.5	15.7	13.5	12.5
	Imports	18.5	29.2	27.7	12.5
Middle East	Exports	—	5.5	10.4	12.9
	Imports	—	6.5	10.2	22.4
Eastern Europe	Exports	0.6	7.8	22.6	16.1
	Imports	1.1	4.0	13.9	10.3
Western Europe	Exports	32.4	27.3	19.6	29.3
	Imports	32.1	39.9	21.4	39.2
of which:	Exports	22.4	27.0	11.1	9.7
	Imports	20.8	19.4	7.8	7.7
Other	Exports	38.8	28.4	25.7	24.1
	Imports	35.3	15.8	18.8	21.2

Exports slump as nation's holdups multiply

A FEW years back, India's exports were booming, rising by 25 to 30 per cent a year, and the pundits freely forecast that the country was discovering "an export culture" with daily sales successes, especially in the growing Middle Eastern market, with orders won in the face of fierce competition from the West. With exports rising from 4 per cent of GNP to almost 7 per cent, the hopes seemed reasonable.

But today they look sick. Not only is India facing its biggest ever trade deficit, but export growth has slumped. Two years ago export growth was small, about 5 per cent, a year ago it was smaller, less than 4 per cent, and in the current year ending this month it may be slightly negative. In terms of earnings, exports shot up from less than Rs 20bn (\$1,000m) in 1972/73 to more than Rs 51bn in 1976/77. In 1978/79 earnings were Rs 58.2bn. In the first half of this year the growth rate was 4.8 per cent, but in view of the stagnation of industrial output it is unlikely that even such a modest rate can be maintained, so exports may be less than Rs 58bn.

Of course there are particular difficulties this year. Time after time, businessmen and exporters have complained about breakdowns in the whole infrastructure from power supplies to shipping space. It is instructive to quote from a plaintive paper prepared by the Engineering Export Promotion Council last month for Mr. Pranab Kumar Mukerjee, the Commerce Minister. In recent years, engineering exports have been the star performers in India's trade, rising from about Rs 1bn in 1969/70 to Rs 7bn last year and with high hopes of exports of Rs 10bn next year and Rs 100bn in 10 years' time.

Framework

But this year, says the council, the engineering industry as a whole, and the exporting sector in particular, has greatly suffered during the past 12 to 15 months from the complete breakdown of the economic system. As a consequence, the basic inputs and infrastructural facilities like steel, pig iron, coal/coke, power, diesel, railway and road transport and shipping, so essential for engineering exports, were not available. Import of basic raw materials was permitted, "but" the council said, "export was

not competitive on the basis of imported material."

Clearly from that account, it is not just a failure of power, problems of labour, erratic rail and shipping movement, but also a failure of policy. At a time when the trade deficit was growing and exports jeopardised, when the Commerce Ministry was keen to push exports, the Industries Ministry stepped in and banned certain categories.

Consideration of the policy framework is essential as it is clear that India's carefully checked and balanced system of licensing restrictions has prevented and continues to prevent the emergence of a full-blooded export regime.

Within its own limits, the policy has had successes. As Mr. Vijay Kelkar, adviser to the Commerce Ministry, pointed out in a thoughtful paper early this year, both the range and quality of Indian exports have vastly improved. At the time of independence, the U.S. and the UK between them took more than 45 per cent of India's exports which consisted largely of agricultural products, crude materials and simple manufactures like jute goods and cotton textiles. In 1951-52, exports of iron and steel goods were about \$3.3m and of engineering products \$1.2m.

In these terms, the structure of Indian exports has changed completely. The spread of markets to which India is exporting is wide and well distributed. Although the West as a whole takes more than half of India's exports if Japan is included, several regions of the world take more than 10 per cent of India's goods: 13 per cent goes to the Middle East, 16 per cent to Eastern Europe and 12 per cent to developing Asia.

Manufactured goods account for about 60 per cent of the exports (though this year the percentage may be lower) with a large part accounted for by technology intensive products such as engineering goods, electronics, and chemicals.

Mr. Kelkar points out that the "concentration index" for products has declined to 23 and the "geographical concentration index" reflecting the areas to which the exports go, has declined from 69 in 1947 to 22.

A curious feature of the paper is that the Commerce Ministry adviser is keen to stress India's "self reliance" and "lack of dependence."

Though he later points out the potential losses to the economy from neglecting trade, Mr. Kelkar almost apologises that exports are as high as 6.22 per cent of GNP in 1977 as it might be said that this implies dependence. He says "this share does not seem to be excessive."

What the future is for Indian exports is difficult to analyse. There is plenty of scope for expansion. Anyone who has seen the variety and the quality of some Indian successes can only be surprised that they are still so low. The Middle East still offers opportunities. Indeed, though at the time much was made of Indian successes in that region, the Indian Chamber of Commerce cites figures to show that between 1971 and 1977 the Indian share of Arab Markets' imports, actually declined from 1.76 per cent to 1.45.

Greater sales

With the opening of the Indian Trade Centre in Brussels specialising in seven major product areas, it might be hoped that there will be greater sales at least within the EEC as Europeans get a better chance to see the range of Indian goods and Indians may better appreciate the European market and its wants and needs.

But after a short time, anyone considering the issue bumps hard against the question of whether India really wants an export boom or is prepared to take the policy measures to set it going. Against practically all exports there are questions and clashes with India's overall economic policy as it is now set out.

Traditional items like tea, jute and leather have this year shown a brighter picture than non-traditional exports. Leather exports rose by 28 per cent, cotton textiles by 17 per cent, and jute goods by 20 per cent in the first half of the year, as engineering exports fell by 21 per cent and jewellery by 41 per cent as the world market shrank. But in the traditional items, especially tea and jute, the growing home market has already reduced exports.

In a poor country the ready availability of "the cheapest beverage in the world" has increased home demand and reduced the exports to a minority share of production. Bad harvests because of drought, irregular shipments and the

anxiety of the Government quickly to cream off anything it thinks of as an excess profit as prices rise have also contributed to make India what Calcutta tea interests call "a residual rather than an essential world export."

With forecasts of domestic demand rising as high as 1,300 to 1,400 kilograms by the turn of the century against present production of 545 kilograms, there is a need to replant and extend the size of the gardens if exporting is to continue. But tea interests say that with the heavy rate of taxation "there is precious little left for ploughing back and credit has become tight and expensive these days."

Jute exports have also fallen to 40 per cent of production and Mr. K. K. Bajoria, chairman of the Indian Jute Mills Association, expects a further fall to 25 per cent over the next five years.

He complains that it is difficult to increase labour productivity as some politicians are demanding that the manning levels should be increased even though in the Indian mills four or sometimes five workers are doing the job of one person in an equivalent European mill. The jute picture is complicated because the Marwaris who own most of the mills are nearly universally regarded as poor employers, but in this traditionally large export area there is a case for doing something quickly while there is still time.

Non-traditional items are not constrained by shortages of land or production that is at the mercy of nature, but some of the barriers may be more difficult to break down. They include economic policy, political horizons, knowledge and adaptability of men and institutions.

One remark which I encountered frequently, and more frequently in Government than business offices, was that Indian goods were suitable for other developing countries. Seen in the wrong way this might be regarded as dangerously paternal. The faster developing countries might prefer to buy higher technology and more expensive goods from the West if they thought they were being panned off with anything inferior or shoddy.

Interestingly enough, officials in some other Asian countries have a prime complaint that Indians sell their goods as if they were shoddy. To quote one trade official from South East Asia: "The quality of

Indian goods is good to very good, but their promotion is awful. Ask them for literature or look at their packaging and it frequently comes almost in brown paper as if they are ashamed."

Another question is what will be the most important markets for India. And all the indications are that the high volume markets are in the West. The World Bank, in its annual development reports, has suggested that increasingly the Eastern European countries are going to offer competition rather than sales to developing countries, yet the demands of India's foreign policy may push it closer to the Soviet Union and emphasise the need for a balanced trade. Certainly it is noticeable that the pro-Soviet lobby in the Indian Parliament is hyperactive and when the West is mentioned it is usually for criticism.

If India wishes to increase

engineering exports to Rs 100bn by 1990, a ten-fold increase in 10 years, a whole new style of operating will be called for. Such a rise calls for qualitative changes in production technology, design, labour and Government policy.

Criticism

It is worth quoting from the evidence of the Indian Chamber of Commerce to the official committee under Prakash Tandon, head of the National Council for Applied Economic Research, which is examining India's export strategy in the 1980s. In practically every line there is an implied criticism of present attitudes and policy.

"It is important to fashion the economic policies which have an impact on the investment climate, to create conditions conducive to maximum capacity utilisation and make them more attractive to potential investors. The vital role

played by profitability, uninterrupted and adequate cash flows and high capacity utilisation cannot be overemphasised.

"Indian industry has to compete with modern, high technology production processes of the Western countries. Therefore advantages due to economies of scale should be available to our industry by ensuring that the policy towards technology in Indian industry promotes the use of modern competitive techniques which alone can provide a favourable market for Indian goods abroad.

Both the chamber and the Engineering Export Promotion Council stress the need for proper transport and port facilities, regular supplies of inputs and a stable export policy. The engineering council also suggests "since 50 per cent of the exports in future are going to be in the field of capital goods and turnkey projects it is necessary that a separate export

import bank is set up to take care of finances needed for project exports and capital goods."

Finally, there are questions of the Government's attitude. Will it be prepared to sanction the investment and the additional licensing to cope with a big increase in exports? Can a slow-growing, slow-moving country like India, chugging along at 3 or 4 per cent a year, hardly above the level of population increase, hope to compete with a flexible Japan or Korea? They are growing at 6 to 10 per cent and already have head starts in technology and export contacts.

Between 1961 and 1978, India's share of world exports fell from a meagre 1.2 per cent in 1961 to a paltry 0.5 per cent in 1978. It will take a brave new world of decisions to hold India's position, let alone to reverse it.

Kevin Rafferty

PROFILE: ADITYA VIKRAM BIRLA

The family business

ADITYA VIKRAM BIRLA is one of the bright young men of the Birla family, India's largest industrial group. He sits in a sixth-floor cool modern office cheerful with plants, smooth leather chairs and a catching modern picture, all in clean contrast to the grubby but still bustling Bombay all around.

Mr. Birla, the grandson of G. D. Birla and the son of B. K. Birla. Although the various members of the Birla family protest that there is no such thing as a "Birla group" as in the government Monopolies and Restrictive Trade Practices legislation, Mr. Birla admits that the family background helped him to get started.

MIT taught him about chemical engineering and "gave me a sort of confidence that I could not be fooled on technical matters." But a similar young man starting off from a similar base would find it difficult because "access to finance is the key question." Mr. Birla was quickly given a licence for a textile mill and there "I made my own mistakes and learned the tricks of the trade."

He still stands in admiration

of the older members of the family: "If anything they are faster than we are."

He makes a comparison between India and South East Asia as regards Government clearance of new projects. "In Singapore, it is a few weeks; in Thailand, two to three months; in the Philippines, five to six months; in Indonesia, six to 12 months; and in India it takes two to three years."

"As far as finance is concerned, in South East Asia it takes one or two months, but in India it takes the banks five to six months and then the forms have to be sent to the Reserve Bank which takes another two to three months."

Mr. Birla, who is still in his 30s, set up a carbon black plant in Thailand, with modern technology allowing a 60 per cent reduction of power because the plant uses the steam it generates. One of the reasons for going to Thailand was because he could not get the plant in India "where we have to put up with 15 years old technology and wasteful inefficient processes."

He claims that "by not allowing investment, India is importing unemployment. We are not allowed to expand in viscose staple fibre. So we are helping British employment by importing from Courtaulds."

He estimates that about 7 per cent of the business of the companies he is responsible for—which include Gwalior Rayon, Indian Rayon and Hindustan Gas—goes to foreign trade. "There are very few cases where we export other than the surplus. There is duty protection all over Western Europe."

And unless we have further investments it will be difficult for India to export, as the home market is growing. As it is the home market has been suppressed. There is no hire-purchase or anything like that in this country to make for easy payment and to boost the market. There is nothing like that: banks do not even give you loans on property."

Like many older captains of Indian industry, he has great hopes of Mrs. Indira Gandhi, who he says, "has already appointed committees to sort



Aditya Birla: could not be fooled

things out. She is a leader." But then he cites facts from Mrs. Gandhi's previous spell as Prime Minister to point out what is wrong with India: "During 1971 to 1976 we had 19 amendments to the constitution, 463 statutes, 97 ordinances, 30 regulations, 114 Presidential Acts for states under Presidential rule and 36,515 rules drafted, orders and notifications, many of them with implications for business. This is a country for the creation of rules, not effective government."

Kevin Rafferty

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"A major stake in India's future"

AN EXPERT GROUP, appointed by the Government, is working on India's export strategy and its goals in the 1980s. Two suggestions are under consideration.

First, India's share in world exports, which declined from 2.97 per cent in 1933 to 0.5 per cent in 1978, is to be lifted to 1 per cent. This involves raising India's exports from Rs. 57bn in 1978-79 to Rs 350bn in 1990-91. It amounts to an annual rate of growth of 18 per cent in exports.

Second, India's share is to be raised marginally from the present 0.5 per cent to 0.6 per cent in 1990-91. (12 per cent annual rate of growth). In absolute terms, India's exports in 1990-91 would be Rs. 250bn.

Financing exports in the 1980s, according to the thinking in the Government, calls for a two-pronged attack. Taking first the more difficult task of exporting non-traditional items, a strategy has to be evolved to create the necessary infrastructure to handle the magnitude of exports envisaged.

The Engineering Export Promotion Council, a Government-sponsored organisation, has projected engineering goods exports to rise from Rs. 10bn (1978-79) to Rs. 93.91bn in 1990-91—a nine-fold rise in ten years. On the basis of a modest Rs. 250bn target for exports in 1990-91, the share of engineering goods works out to 37.56 per cent.

Apart from the consumer goods, whose export is handled by normal banking channels through letters of credit, capital goods and turnkey projects are expected to contribute to the export effort in a big way. Their exports are slated to rise from around Rs 5bn in 1980-81 to Rs. 44.45bn in 1990-91. Capital goods will thus maintain a 50 per cent share in total engineering goods exports.

Against a negligible amount of Rs. 50m in 1955-56, engineering goods exports were valued at Rs 6.85bn in 1978-79 and by the turn of the current decade were expected to touch Rs. 93.91bn. However, India's share in the world export of engineering goods remains low at 0.21 per cent.

As the developing countries, who are the major importers of

Two-pronged attack to finance exports

INDIAN TRADE WITH SELECTED COUNTRIES (U.S. \$m)

	Exports		Imports	
	1970	1978	1970	1978
France	24.5	269.0	23.1	309.0
Germany	44.7	346.3	136.4	762.6
Iraq	34.4	118.5	111.6	541.3
Iran	12.4	45.1	5.1	94.4
Japan	281.3	726.4	97.0	810.8
Saudi Arabia	20.5	110.3	23.1	342.3
U.K.	234.7	562.7	140.3	739.9
U.S.	274.2	981.4	614.0	1,042.6
USSR	271.5	517.6	271.5	207.5
Others	825.8	3,414.3	674.5	3,343.0
Total	2,024.4	7,081.9	2,024.4	8,333.4
India's % of world trade	0.72	0.63	0.78	0.65

capital goods, are likely to ask for credit terms, sales on credit may account for 30 per cent of the total value of such exports. The normal practice is that the cash component of these exports is 20 per cent and deferred payment arrangements are allowed up to 80 per cent.

On that basis the quantum at credit is likely to increase from Rs 1.2bn in 1980-81 to Rs 11.16bn in 1990-91. Besides, exporters of capital goods are required to furnish guarantees for advance payment and performance aggregating 30 per cent of the value of the capital goods exports. These guarantees are required to be given in the case of all exports of capital goods whether or not on credit. Non-borrowing facilities by way of guarantees will progressively increase from Rs 1.50bn to Rs 13.95bn by the end of the 1980s.

Packages

The credit budget of India's financial institutions is sought to be reduced by tying up credits given by OPEC countries whose aid is untied, to developing countries. For instance, in 1977 the aid was over \$5.5bn. The equipment packages from India can be married to the OPEC flows to promote project exports. Also, there is the other source of private capital flows in the form of Euro-currency loans.

The Government is exploring the possibilities to promote exports of capital goods to Asian and Latin American countries, which are already borrowers of Euro-currencies,

against medium-term Euro-currency loans.

A working group was set up in the Industrial Development Bank of India, the apex bank for term lending and export credit financing, with representatives of the Reserve Bank, export credit and guarantee corporation (counterpart of ECGD of the UK), banks, and representatives of the economic ministries of the Government, to screen export proposals at the pre-bid stage.

Clearance will be given to the financing proposals from all banks under one roof. Indian exporters can now make business commitments to buyers as the necessary financial arrangements are available right at the pre-bid stage.

The IDBI already operates quite a few schemes to facilitate capital goods exports. It refinances term export credits granted by banks. The bank extends finance to borrowers in participation with banks. It has a scheme to extend direct credits to foreign buyers or institutions.

IDBI participates in extending pre-shipment finance with banks for manufacturing high value equipment with a manufacturing cycle of more than six months. Normally, pre-shipment credit up to 180 days is provided by banks.

Despite the availability of these schemes, the capability of IDBI to handle engineering goods exports of more than Rs 93bn in 1990-91 is doubted. As an apex organisation for domestic and external term financing, IDBI is preoccupied with the larger task of

domestic financing. A section in the Government, supported by an influential exporters' lobby, is of the view that a separate export bank will not only finance exports but also assume a promotional role. It is to undertake periodical review of the various markets for Indian products and guide the exporters right from the bid stage to execution of the contract.

In the case of merchandise export, the Reserve Bank of India has taken the lead in establishing the necessary infrastructure. On the basis of a report of Toda committee, named after a Japanese banker who studied the cost of export credit in India, the Reserve Bank introduced the export credit (interest subsidy) scheme in 1968.

It provides for compensating banks extending export credit by way of interest subsidy at 1.5 per cent per year to make up partially for their losses in interest earnings and banks are expected to change to the exporters 11 per cent interest per annum.

In 1976, the RBI introduced a duty drawback credit scheme, which is intended to benefit exporters in the form of interest-free advances from banks up to 90 days against expected refund of indirect taxes levied on exported commodities.

Export credit has been assigned priority for purposes of leading. At the end of May 1979, export credit given by banks was Rs 14.47bn—an increase of around 30 per cent in 11 months.

A major problem for exporters is the sharp fluctuations in the foreign exchange markets in the losses arising out of depreciation of the rupee. The strengthening of sterling, which is chosen as the intervention currency for external transactions of the rupee, has resulted in sizeable losses to exporters. Since most export contracts are quoted in U.S. dollars, exporters want some sort of direct relationship between the rupee and the U.S. dollar established to avoid uncertainty.

R. C. Murthy

Government under pressure as import bill soars

WITH INDIA'S import bill soaring towards Rs 85 to 90bn (about \$11bn) in the current year, the Government is under fierce pressure to reverse its policy of liberalising imports.

At the moment the view in the Commerce Ministry is that with savings in some areas and with careful pruning in others it may be possible to hold the line and continue the liberalisation. But if oil prices continue to rise...

It is a testing time. With India importing more than 60 per cent of its oil needs, half of its export earnings are immediately spent. From this the economic choice is almost between a crisis tomorrow and a crisis next week: if the Government does not re-examine and restrict imports, it may find its foreign exchange reserves quickly eaten up; if it restricts imports it may be tying its hands for the future and become trapped in the worst consequences of import substitution.

While India's exports have remained sluggish the country's import boom has continued and the slight trade surplus of 1976-77 has grown into a huge and threatening gap. Merely by looking quickly at the figures it is tempting to suggest that oil imports should be cut—thought that is reinforced by the sight of traffic jams in the main Indian cities wreathed in exhaust smoke.

Common sight

But the scope for reducing oil consumption is limited. Petrol accounts for slightly more than 5 per cent of total oil products consumption. It is a common sight to see Indians economising by fitting four people on to a motor scooter or motorcycle and squeezing up to 10 or more into a car.

In industry there are inefficiencies in the use of oil because of old plant, but the best boost to the use of oil in the economy would be to get the infrastructure sorted out and the power supply and industry running normally so that wasteful use of diesel in private generators and in carrying coal across India could be cut out. And in the longer-term the search for alternative sources of energy is the only sure way to curb the oil bill. But that does not solve the immediately pressing problems.

IMPORTS FOR SELECTED COMMODITY GROUPS (monthly average Rs m)

	1974	1975	1976	1977
Cereal and cereal products	636.5	1,118.9	732.1	1,020.0
Textile fibres	55.9	60.8	169.5	359.0
Petroleum and petroleum products	964.1	1,021.4	1,176.7	1,296.3
Chemical elements and compounds	155.2	150.2	114.3	162.0
Fertilisers (manufactured)	363.5	391.2	164.8	215.2
Iron and steel	353.1	259.9	188.1	216.3
Non-ferrous metals	148.9	83.7	132.2	159.1
Machinery and transport	579.8	778.6	815.9	933.4
of which:				
Machinery other than electric	326.3	420.5	548.9	587.4
Electrical machinery	167.3	147.3	144.1	105.8
Transport equipment	109.3	130.9	122.5	152.4
Total imports	3,765.6	4,387.3	4,179.3	5,021.7

Some relief would be provided if India could get industry moving and curb the exports of steel, cement and aluminium, some of which India was exporting two years ago. Fertiliser imports could also be reduced and this would provide an all-round boost to the economy.

In agriculture too India's erratic performance has made the import problems worse. This year there has even been some talk of importing sugar to replace production prices stable after a record 6.8m tonnes in 1977-78, when India was able to export to 4.9m tonnes in 1979-80.

In the case of sugar the fluctuations in the size of the crop are not caused simply by changes in the weather but by the complex interplay of the whole panoply of Government controls, support prices, fixed prices, hoarding and speculation.

But the area where imports have grown most startlingly is in edible oils. As India has increased food production and removed the need for food grain imports, so edible oil imports have risen. This year they may go up to 1.3m tonnes and the cost to Rs 10bn (\$549m) which may make edible oils the most expensive item after oil.

Most economists expect that edible oil imports can only rise, even if India steps up its own production. Though Indian per capita consumption of edible oil has risen from 3.5 kilograms a year in 1973 to 5.5 kilograms in 1977 it is still a long way below the internationally accepted standard of 22 kilograms.

All in all, India imports little more than what is barely

needed to keep the economy steadily moving. Policies of import substitution pursued over the years have brought their dangers.

Given the high level of foreign exchange reserves, thanks to the previous narrowing of the trade gap plus earnings from tourism and remittances from Indians working abroad, the Janata Government had begun to liberalise its import policy. Whether "liberalisation" is really the correct word is open to dispute. Foreign economists have referred to it as "de-bottlenecking."

Sets of rules

In spite of "liberalisation," the annual document setting out India's import policy is complicated by sets of rules and regulations, lists of items allowed under open general licence, restricted items, banned items, lists of canalised items, lists of categories of users, and categories of licences.

Even where the import of capital goods has been allowed against global tender, officials are left with a lot of discretion. Thus, for example, the 1979-80 import policy lists 14 categories of capital goods import of which can be allowed against global tenders, and adds:

"The selection of suppliers on the basis of such global tenders, foreign or Indian, will be subject to scrutiny by a committee set up in the Department of Heavy Industry."

Comparisons will be made between Indian offers (competitive) and foreign offers on the basis of the landed cost of the latter i.e. cif cost plus import duty as applicable. The recom-

mendations of the empowered committee will be considered by the Department of Commerce for deciding the grant of import licences."

The response to the liberalisation has been interesting. Private industry has argued that more items should be placed under open general licence and complained that it is still restricted because certain goods essential to production cannot be freely imported. The Punjab, Haryana and Delhi Chamber of Commerce, for example, mentioned difficulties with aluminium sheets, nickel sheets, soda ash and argued that imports of machinery should be allowed whenever required instead of only twice a year.

But the liberalisation of imports of capital goods has met with opposition, especially from some of the heavy equipment makers in the public sector. In spite of the devaluations of the rupee and inflation abroad and the benefit of their own lower wage costs, Indian heavy equipment makers still have difficulties in submitting lower tenders than their foreign rivals. This is especially so in the case of more specialised equipment.

Pressures from the Indian groups have been quite strong. The Economic Times newspaper recently warned the Government that though it might be tempting at a time of foreign exchange tightness to bring down the import shutters once again, the consequences at the very least will include turning India into a purveyor of second-class technology.

Some economists have gone on to argue that if it really wants to grow India should allow the breath of competition not only into the capital equipment industry but also into manufacturing and consumer goods.

It is tempting to urge that a breath of fresh air would be good for India and that further liberalisation would sharpen efficiency and impel exports. But it would also have tremendous implications for the vast spider's web of controls and vested interests, from politicians to their own strategic interests to protect. The best that can be hoped is that the shutters are not firmly pulled down.

Kevin Rafferty

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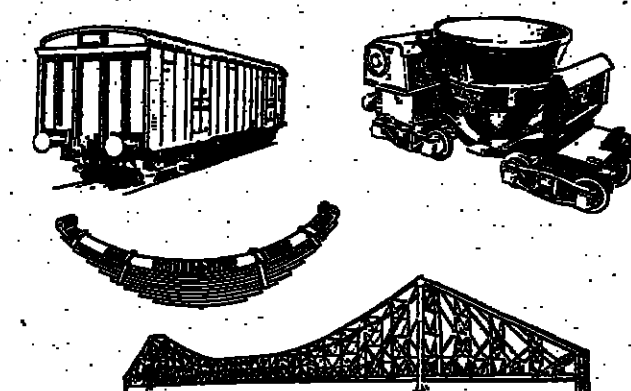
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Internal trading scene forms complex web

TRADE TRANSACTIONS inside India in 1978 accounted for Rs133bn (£7.3bn), or roughly 12 per cent of the net domestic product. This shows the immense amount of activity concentrated in catering to the needs of the country's estimated 850m population and also the substantial part devoted to what are strictly non-productive areas. Internal trade is difficult to monitor.

Largely because of the size of the country and the locations of the bulk of the population in its 1m villages, the Government has found it impossible to keep track of the innumerable retail traders, the smallest unit of which is probably just a basket balanced on a village woman's head.

Yet most towns, districts and smaller administrative units have organised markets through which the complex process of marketing industrial and agricultural products is gone through. From the stockists to the wholesale markets known as "mandis" scattered all over, the trading community has created a web of its own. It operates in a freely competitive manner that is hard to find a parallel for in any other part of the world.

Methods

Its representatives do not reveal the extent or methods of their operations fully and so they are the target of politicians when prices rise, as they are doing now.

The trading community itself considers itself a scapegoat and possibly this is true. It is easy to talk, as politicians and officials do, of "black marketeers" and "hoarders" at a time of scarcity such as when the monsoon fails and prices automatically rise. The traders themselves blame low production for the situation, and not wrongly. But it is equally true that their operations, or a substantial part of them, are conducted furtively and with the object of cashing in on a difficult situation.

That there is a thriving black market in India for such scarce items as cement and steel or what the authorities call essen-

tial commodities is borne out by the fact that stringent statutory countermeasures have had to be resorted to. That such operations exist on a massive scale is borne out by the fact that, during the disciplining days of Mrs. Gandhi's emergency, "black money" (as money not declared for tax purposes is called) worth as much as Rs 15bn (£820m) came into the open under a voluntary disclosure scheme.

The "black money" operates widely to finance illegal commercial operation and is a major cause of the scarcities and rise in prices in India. Since the days of the emergency, it is thought to have accumulated again and is now virulently at work. This is one reason why the caretaker régime of Mr. Charan Singh during the later part of 1979 thought it necessary to introduce the much-hated preventive detention through an ordinance.

This measure, called the Blackmarketing and Maintenance of Essential Commodities Ordinance, has been formally enacted by Mrs. Gandhi and preventive detention is back on the statute book. There was only notional opposition to it from Mrs. Gandhi's opponents since it was initially brought in by them. This underlines the need to regulate and regularise the channels of trade, the bulk of which remains in private hands.

It has long been the aim of the Government to introduce a countrywide distribution scheme through a system of "fair price" shops. This really means Government controls and a kind of rationing with which private trade is always being threatened but which it manages somehow to prevent being introduced.

The Janata Government's "product-cum-distribution" system, formulated after innumerable official committees made countless recommendations, never really got going. Mrs. Gandhi has also spoken of the need for some scheme but the task of ousting the private trader is complex and almost impossible. Officials concede that the scheme will have to be limited to major urban

centres and cannot possibly cover the rural areas.

Official regulation of trade has therefore taken a limited form which consists mainly of trying to prevent shortages or adopting ad hoc measures when these arise. In the past three years, this has taken the form of increasing supplies through imports, something made possible by the comfortable foreign exchange reserves position.

Huge quantities of edible oil, cement and steel to mention only some items, have been imported. But the introduction of what is described as an enduring basis for attaining the dual objective of growth and price stability remains elusive.

Equitable

The aim is to introduce a permanent distribution mechanism that aids and guides allocation of items of mass consumption to all the people in a fair and equitable manner so that the unorganised sections of society do not become victims of blind market prices. The halting steps taken to achieve this by the Government include emphasis on increasing production of the "essential commodities" which is acknowledged to be the idea solution but is difficult to actually bring about.

The measures also include giving incentive prices to farmers, introducing suitable monetary and credit policies, restructuring the import and export policies (for instance by imposing a ban on export of items that threaten to become scarce within the country), preventing speculation and hoarding largely through legislation (something that has not worked), and the removal of transport bottlenecks and strengthening of public distribution system.

The production-cum-distribution scheme for selected items has not got off the ground except in a small way, even though it has been approved by the National Development Council which is the country's supreme economic decision-making body. One of its main objects is to establish at least

one "fair-price" shop in a village or group of villages with a population of 2,000 and this will take a long time to do. It also involves actual manufacture of selected items and effective procurement and buffer stocking, if necessary with subsidies.

The existing public distribution system consists of a network of about 240,000 "fair price" and ration shops, the bulk of which are in urban areas. About 68,000 are run by the cooperative movement, which is becoming increasingly important in internal trade, and cooperatives are considered to be the most useful agencies for the distribution system. Yet the movement has had a mixed success and this is another reason for the fact that internal trade remains the favourite hunting ground of the unscrupulous.

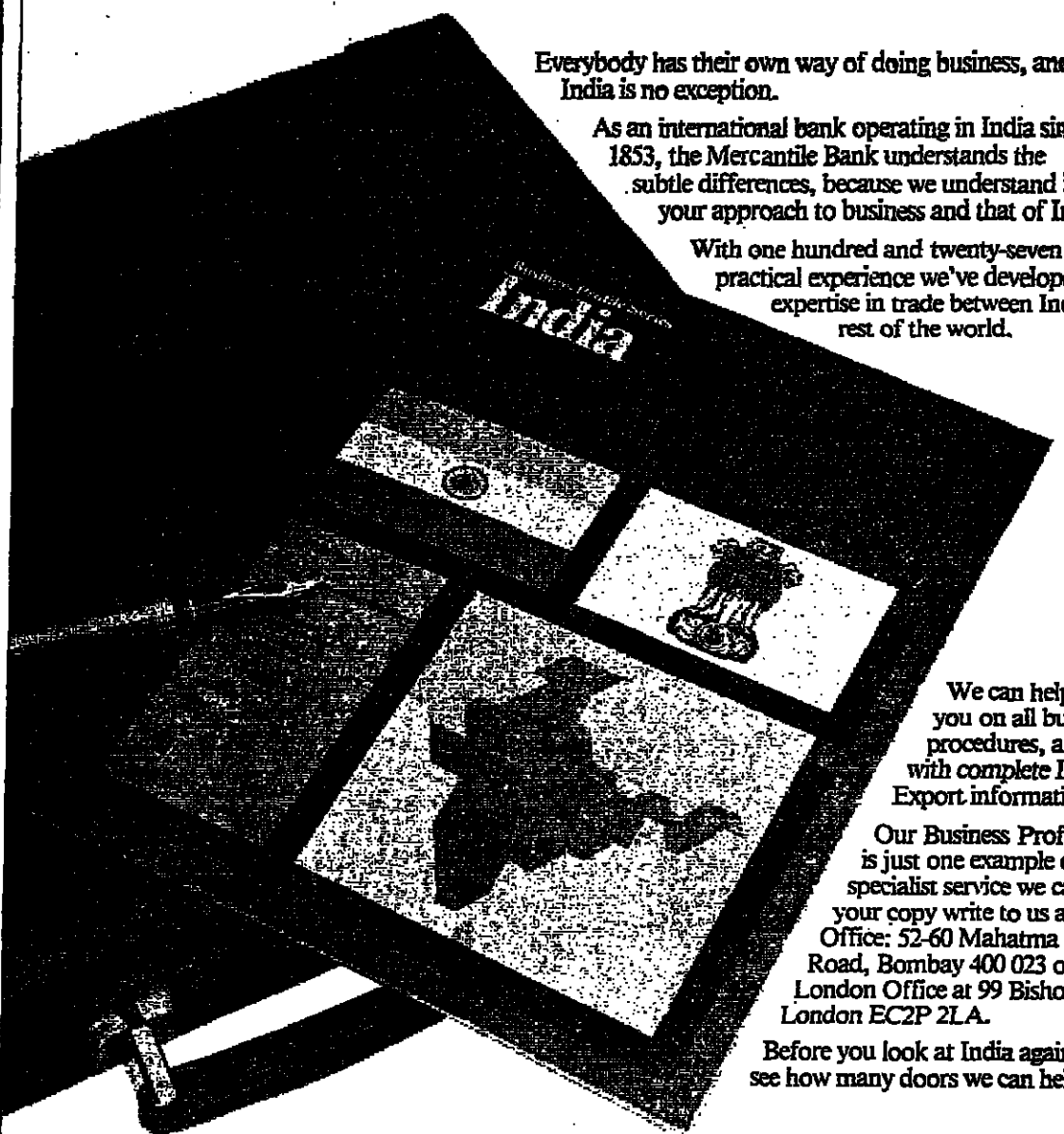
By now—with the exception of the Marxists in West Bengal who have opposed the measure totally and announced they will not use it—most people share the Government's view that the much-disliked preventive detention provision of the Blackmarketing and Maintenance of Essential Supplies Act is necessary as a deterrent measure if prices are to be checked. Yet the State has many other weapons in its armoury which really need to be implemented to achieve the same object of the Act.

The main weapon is the Essential Commodities Act of 1955 which covers 65 items. Under its provision, it is possible to imprison violators for seven years after a summary trial, forfeit property and confiscate packages and other items being hoarded.

Many feel that this is deterrent enough if properly used and all it needs is the will to enforce it so that the possibility of misuse of preventive detention for political purposes is avoided. For the present, however, there seems to be no escape from the disorganised and uncontrolled manner in which the bulk of internal trade operates.

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Exports growth aided by promotion programme

IMPROVED EXPORTS of manufactured goods are now vital to India's economy, and fortunately there appears to be a growing market in the major industrialised countries for inexpensive engineering products.

This is because many of them have low added value and require high labour input, and are therefore barely profitable to produce in Europe and the United States. The list of goods of this kind successfully produced and exported from India is growing rapidly.

They include scientific instruments, castings and forgings, builders' hardware, bicycles and components, car parts, hand tools, industrial fasteners, electronic components, machine tools, and diesel engines.

These products are produced by a dynamic and expanding engineering sector, made up of 125,000 manufacturing units (almost exclusively small private companies) which employ nearly 25 per cent of the country's manufacturing labour force. The sector has an

annual output of more than £5.6bn and its exports are likely to be worth nearly £800m this year, with a predicted annual growth rate of 25 per cent.

This growth has been accompanied, and obviously assisted, by an intensive export promotion programme, funded largely by the Swedish International Development Authority and the International Trade Centre, a GATT/Unctad organisation.

A number of exhibitions have been held in the United States, Denmark, West Germany, the United Kingdom, and the biggest yet is to be held in Rotterdam in May. For the first time the whole Indian engineering industry will be represented, including the heavy sector and companies able to handle large projects. The fair is to be funded largely by the Dutch Government, and there are plans for a similar exhibition in Canada next year, for which aid will also be provided.

Dr. I. P. Singh, Acting High Commissioner of India to the UK, said recently at the opening of the Birmingham fair that

the Brandt Commission report had made it clear that the industrialised world now had little option but to trade freely with Third World countries since it was in both their interests.

He praised the role of the Trade Development Authority of India for its active promotion of Indian manufactured goods, which must be exported in increasing volume and value if the country is to maintain its recently liberalised imports policy.

But it is clear that individual buyers in Western countries do not purchase these goods for any other reason than their price and quality, since there is abundant competition from other countries such as Taiwan, South Korea, and others.

One of the most successfully exported products are electronic components, now worth well over £30m a year and riding on the tremendous growth of the domestic industry, which increased the value of its production from £280m in 1977 to nearly £330m. Exports are

mainly to the U.S., Britain, Holland and West and East Germany.

The value of hand tool exports has also risen steadily to more than £20m a year, achieving an annual growth rate of about 45 per cent. The main customers are Western Europe, the U.S., Japan and Australia.

About 300 companies in India are producing car components with an annual value of production in the region of £140m and growing at the rate of 22 per cent a year. Major customers are Europe and the U.S.

India is also the world's sixth largest producer of bicycles, currently making more than 3m a year, although capacity is nearer 4m. The value of exports, mainly to the U.S., West Germany, Italy and Turkey, is now about £17m a year.

In the higher technology range of products there has been considerable success, with exports of machine tools rising to around more than £10m in value out of a total production level of about £57m in 1977-78.

India also manufactures nearly 30 per cent of the world's diesel engines in the lower horsepower range. With current production in excess of 300,000 units a year from more than 500 factories it is an important industrial activity. Exports of diesel engines were valued at £8m in 1977-78 and engine parts at £12m.

Improved quality

But one of the major constraints on manufacturing industry is lack of capital and new technology, which companies from developed countries can readily provide. The Indian Government hopes that trade fairs will allow companies to see the improved quality of Indian goods and thereby encourage joint ventures.

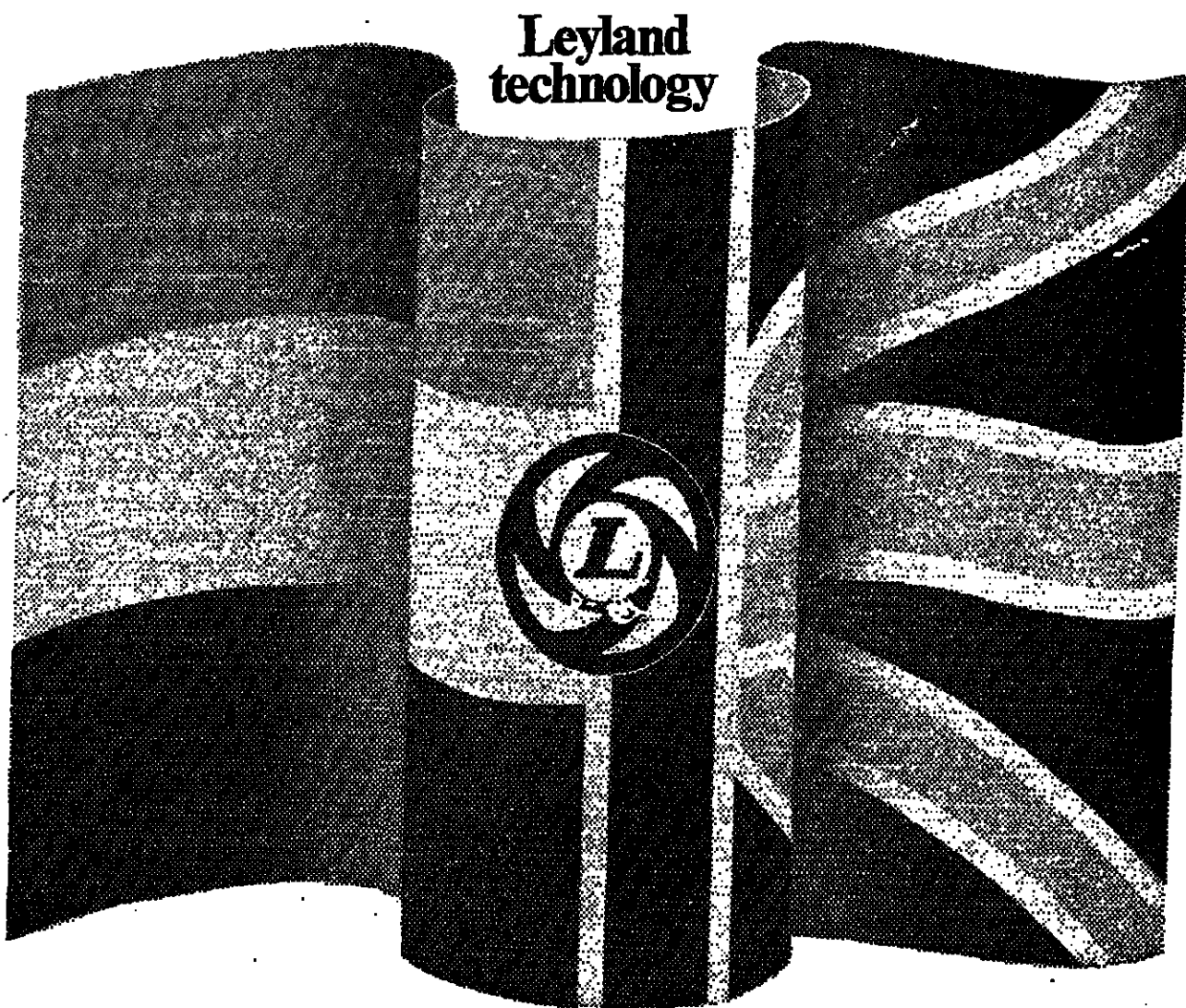
According to the Indian Investment Centre, an international advisory body funded by the Indian Government, about 50 joint venture agreements are signed each year, differing according to the nature of the project.

Some are set up with the main object of exporting the product, usually through the foreign participant, while others are based on domestic demand, although there is usually some provision for exports.

The Investment Centre, with offices in London, New York, Tokyo and Düsseldorf, is one link in a chain of authorities working to provide India's growing industrial capacity with outlets in the developed world.

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Particulars	1977	1978
1. Paid-up Capital	3,719	3,719
2. Reserves	8,946	10,708
3. Deposits & Other Accounts	19,863,327	122,862,002
4. Advances (including bill)	988,522	938,419
5. Which Priority Sectors	314,694	371,337
6. Investments	328,049	448,413
7. Working Funds	1368,835	1882,719
8. Total Income	57,424	115,548
9. Total Expenditure	55,928	112,948
10. Net Profit	2,337	2,598
11. Amount transferred to Central Government	8,235	8,235
Number of Branches	944	1085
Number of Employees	19,351	22,334

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TRADE

Time for fresh view of foreign investment

FOREIGN INVESTMENT is nowhere near the top of anyone's list of priorities for moving the Indian economy into top gear. But there is a growing and influential number of people who believe that better incentives for investment might be a part of a competitive package to stimulate and open up the economy.

Now would be a good time for a fresh look. The massive task of revising the structure of foreign capital under the Foreign Exchange Regulation Act (Fera) is nearing completion. Under this Act big foreign groups have had to reduce their Indian holdings to less than 40 per cent unless they can prove a special case, like being in a key technological sector or big exporters.

Restructuring has sometimes been painful, but the rationale of the Act was that India had no need for foreign domination of consumer industries—which was a throwback to the days of the British Raj.

For India it is a matter of pride that it is the tenth largest industrial power in the world. The country can make hosts of items from basic heavy and sophisticated engineering goods to computers to ocean-going ships, so there is an attitude of: "Why do we need these foreigners to come and tell us how to make things? After all we only got rid of them 30 years ago and do not want them coming back now by the back door of economic colonialism."

Even giants such as IBM and Coca-Cola closed their businesses in India. IBM was not prepared to dilute and Coca-Cola was not prepared to divulge the magic formula for making its drink. India let them go. There is still a lot of foreign capital in India, with Britain in the lead with an estimated \$250m. There is also a feeling that foreign know-how might prove a shot in the arm for a struggling economy. But there are also a lot of old antagonisms to be conquered first.

Suspensions

As a developing country India retains intense suspicions of multinational or transnational companies. At times this produces a strange lack of national confidence, with spectres of the great dreaded multinationals evading the thick net of Indian bureaucratic controls.

Nor has the political or the academic debate offered much incentive to foreign investment. Slogans of socialism and the chauvinism have dominated the debates. Demands for controls are common—even if the controls would smother Indian enterprise and initiative too.

Thus an article last year in the special number of the respected Economic and Political Weekly blamed foreign economic powers of working hand-in-glove with the big Indian industrial houses: "With an eye to quick profits and control over the labour process, monopoly capital which was already well-entrenched, found contemporary Western technology much too attractive,

even if in the process industrial employment and the size of the home market got narrower, and the country became financially and technologically more dependent on the major foreign powers."

Another article in the same weekly noticed the efficiency superior growth and profits of seven big companies with foreign roots including Ashok Leyland, Guest Keen and Williams, Hindustan Brown Boveri and Philips India, in the engineering industry and warned: "The multi-national firms enjoy certain distinct advantages over the other Indian firms in terms of resources and access to technology. They could always use these advantages to grow disproportionately in relation to the industry."

Attitudes

But equally foreign attitudes to India are not too complimentary either. A businessman who has had many dealings with India commented: "Even trading decisions on whether an order should be placed abroad that could be done in India take a long time. For investment there are so many papers and authorities to clear first."

A foreign diplomat with years of experience of India characterised the Indian attitude to foreign investors: "They say if you jump through this hoop and this hoop and this one and this one and you are in a line that we approve of and promise to export and allow us to set your rate of return, then we will consider allowing you in."

Perhaps, not surprisingly, commercial attaches in Bombay and Delhi are looking more closely at prospects for collaboration agreements and exchanges of technology rather than direct investment.

Even with this overall picture of slowness and red tape there are still people who believe that India deserves consideration as a worthwhile place for foreign investment; and there are others who believe that with the new Government of Mrs. Indira Gandhi the climate may change and potential investors find a more welcome door.

Dr. F. A. Mehta, the economics director of Tata, said: "For the foreign company there are several questions. Is the product he is making of such a technological type that he can convince the Government of the need for a major holding. If so, then irrespective of the pressures and the delays, he will have something that he can sell." In today's India, new high-technology products that will assist agricultural growth or benefit power or transport are obviously attractive.

"There is also the question of where else the investor will go," added Dr. Mehta. "For companies in a growing number of countries, like Norway, Sweden, Switzerland and West Germany there is not enough labour to do some of the jobs. Other developing countries may have more attractive climates for investment, but India has its size and in spite

of the low growth there is plenty of skilled manpower.

"Then there is the political question. This is not a question the economist can answer, but in corporate boards round the world at what is going on in countries previously considered stable. I am reminded of the statement by Trotsky 'Banish the word stability from the dictionary of the 20th century.' The media does not offer much help in being able to predict trouble. As far as India is concerned it has its political problems, but still it goes on."

Another leading businessman, Mr. M. S. Patwardhan, managing director of National Organic Chemical Industries and president-elect of the Bombay Chamber of Commerce, also believes that for some companies it may be better to be in India.

"If you have a lot of dealings with India it may be more comfortable to be an Indian partner. If you are on the outside and have to send a man, put him in the Taj Hotel, it can get expensive, he gets lonely, does not know his way around and does not do the best job."

"Selling technology is all right, but there is no real joy in the sale of technology. A businessman wants a piece of the action."

Both Dr. Mehta and Mr. Patwardhan believe that a presence in India is a real asset. Knowing the right people helps enormously in the time-consuming business of what Dr. Mehta calls "corridorizing"—meeting Government officials. Some businessmen have calculated that in India they spend 45 per cent of their time dealing with officials whereas in Germany a similar businessman would spend only 10 to 15 per cent of his time with Government.

Both men say that companies already in India have proved the benefits of an Indian base and both cite Fera not as a time of disinvestment, but as a time of opportunity. Companies which knew how to use the Act, especially Hindustan Lever, ICI and ITC (formerly Imperial Tobacco), were able to expand into areas they would not have dreamed of before. Faced with the prospect of disinvestment and an outflow of foreign exchange, the Government was delighted to see expansion as a way of reducing the foreign shareholding.

Domination

Some companies did disinvest, especially the smaller ones for which "the jump from boot polish to pesticides" as one British controlled group put it, "was too much." Ironically, the Act to bring foreign domination of the Indian economy under control, may well produce grants out of previously big groups. Dr. Mehta estimates that in two or three years when its expansion programme, including a cement factory and plant for making sodium triphosphate, is completed, the assets of Hindustan Lever will rise from about \$140m in 1977 to \$400m. This could make the company India's third biggest in terms of assets after the Birla and Tata groups.

Hindustan Lever is still trying to keep a majority British shareholding as it says that more than 60 per cent of its investments in fixed assets are in the core sector or in sophisticated technology and that more than 50 per cent of its managers are scientists and technologists. The company also argues that a majority shareholding will give Hindustan Lever privileged access to the parent's technological advances. The company's chairman, Mr. T. Thomas, an Indian, is a main board director of Unilever.

Even without the boost of Fera, Mr. Patwardhan says that foreign companies have done well in India. He studied Hindustan Lever, Sandoz and Philips and says that they show an increase in sales turnover between 1969 and 1978 of between three and six times, an increase in net worth of more than three times, and in profit after tax of two to four times.

Package

The other important bonus of being already in India is that it is an insurance should the policy change. As it can take anything from 18 months upwards to get any investment in India, it is still early yet, and the Government is more intent on sorting out its political problems, but there have been one or two slight hints that a more open mind towards foreign investment, within the restrictions of Fera, might be part of an economic package.

Reports in the Indian Press that New Delhi might allow foreign oil companies to drill are surprising, if only because foreigners consider oil to be one of India's success stories, where it bought the know-how, put a good manager in charge, and discovered and landed its own oil from offshore.

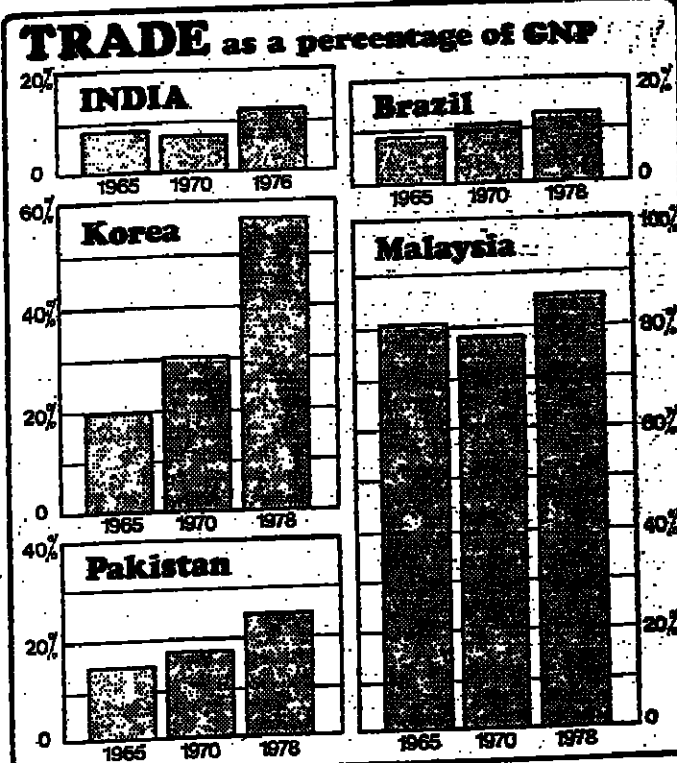
There are some pressures in favour of investment from Indian businessmen, some of them newly discovering that other Asian countries can manage their controls more swiftly than India. One man said: "We put up a factory in Malaysia in three months; in India it would take that amount of time to get the licence for the cement to build the factory."

Mr. Patwardhan says: "The question is how we bring about increased economic growth. Do we try to do it all on our own, or do we seek technological help. Japan did not invent the diesel engine all over again; it bought the best technology in the world as the basis for its economy."

But he adds that in today's rapidly changing world "the best way of getting technology and of ensuring continuing access to improving it is to have a foreign partner. There is no reason why we should be taken for a ride. India is not a small country, say a Chad or a Mali, but a big one with competent businessmen and officials to see that we get a good deal."

It remains to be seen whether the Government takes his advice when it has worked its way down its list of priorities.

Kevin Rafferty



PROFILE: Dr. F. A. MEHTA

Apostle of rapid growth

DR. F. A. MEHTA says: "If I had eight years running this country, India would be importing labour, not exporting it to the Middle East and elsewhere." If that is a startling statement, he has an even more ominous warning: "At the rate things are going Indians will be eating into each other's entrails in the fight to get jobs, houses, food, because of the lack of economic growth."

As he is economics director of Tata Sons, one of India's top two industrial houses, it may not be surprising that Dr. Mehta's views diverge from those of the Government.

"This country has chained itself. Think small, be small, externally remain small, that is the motto. Indian economists are disciplined to think this small (he makes a gesture as if taking a pinch of snuff) until of course it comes to their UN jobs."

It is not just the officials who excite his wrath. He clearly sees a conspiracy involving businessmen as well as officials and politicians. "Let us suppose that Bally wants to come to India to invest in shoemaking with an Indian partner. If I were a rival shoemaker, I'd also go abroad and seek the help of the enemy of Bally to persuade it to come to India and help me make shoes."

Dr. Mehta adds: "There is a lot of lip service to socialism. But I am the true socialist. Let India make 250m pairs of shoes a year, not a mere 65m, so that every adult can have at least a pair a year. I want to bring a television set into every home. Why should the rich be the privileged ones?"

Taking television as an example, he says: "A few years ago, a friend ventured the opinion that by 1982 India should be making 300,000 television sets. His lips were quivering at the enormous figure. I startled him by saying that by 1982 India should aim at 15m sets a year."

"Look at the jobs that could be created: 2 to 2.5m in the

Dr. F. A. Mehta factories, making the sets: 1.5 to 2m in selling them; 1.5 to 1.5m in repairing them; probably another 500,000 in manufacturing the film to show on them; more jobs in making the programmes; and extra income to create even more jobs.

"Instead what happens: it is decided that a TV set is a luxury. There is the cascade effect of heavy taxes. Then 40 entrepreneurs are licensed, a number reduced to 25 as the diseconomies of scale bite and force some out of business. By the time the set is finished the intellectual target is reached: the TV set is a luxury which only the very rich can afford."

"Add far better for the Government to take 5 per cent tax each on 9m television sets—the rest would go to export—than 65 per cent tax on 300,000. For good measure he adds that tiny Taiwan has almost reached production of 15m television sets a year."

He provides a couple more examples of the lumbering, slumbering Indian economy by reference to Singapore: "In Singapore almost all taxi-drivers have colour television in their home. In Jurong a 1.5-ton air conditioner costs the equivalent of Rs 2,800; in India, such are the diseconomies of small production the same air-conditioner costs Rs 12,600."

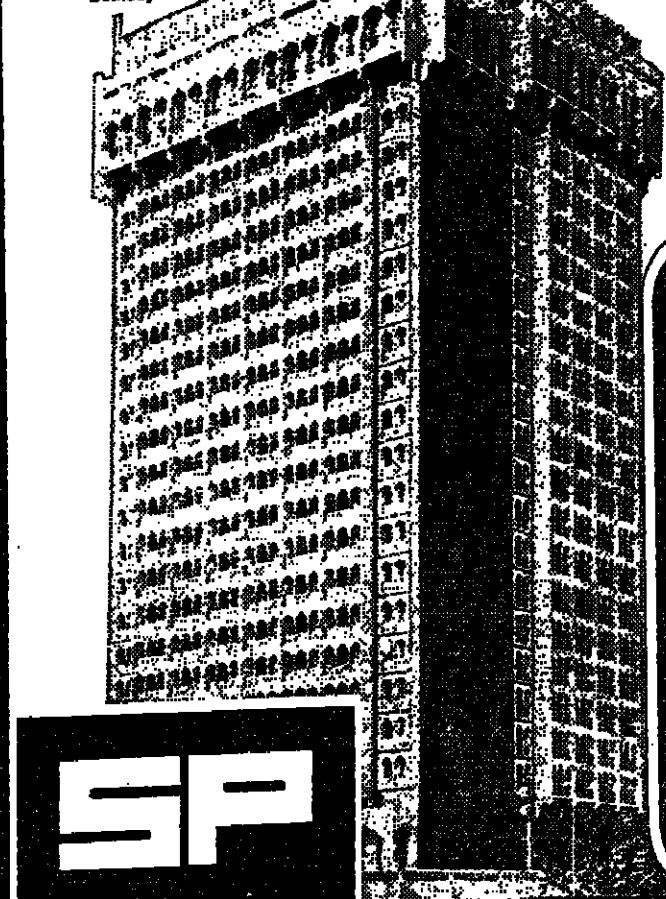
"The answer is to go for rapid economic growth of eight to ten per cent, and to plant redistribution mechanisms that do not impair savings or investment. I am not advocating a Brazilian pattern."

But thanks to the baneful influence of dismal economic schools of Oxford, Cambridge and LSE, though Dr. Mehta is a product of LSE, India "this rich country" continues to take the low road. And Dr. Mehta stays in India in spite of being offered jobs in three other countries as economic adviser to government.

Kevin Rafferty

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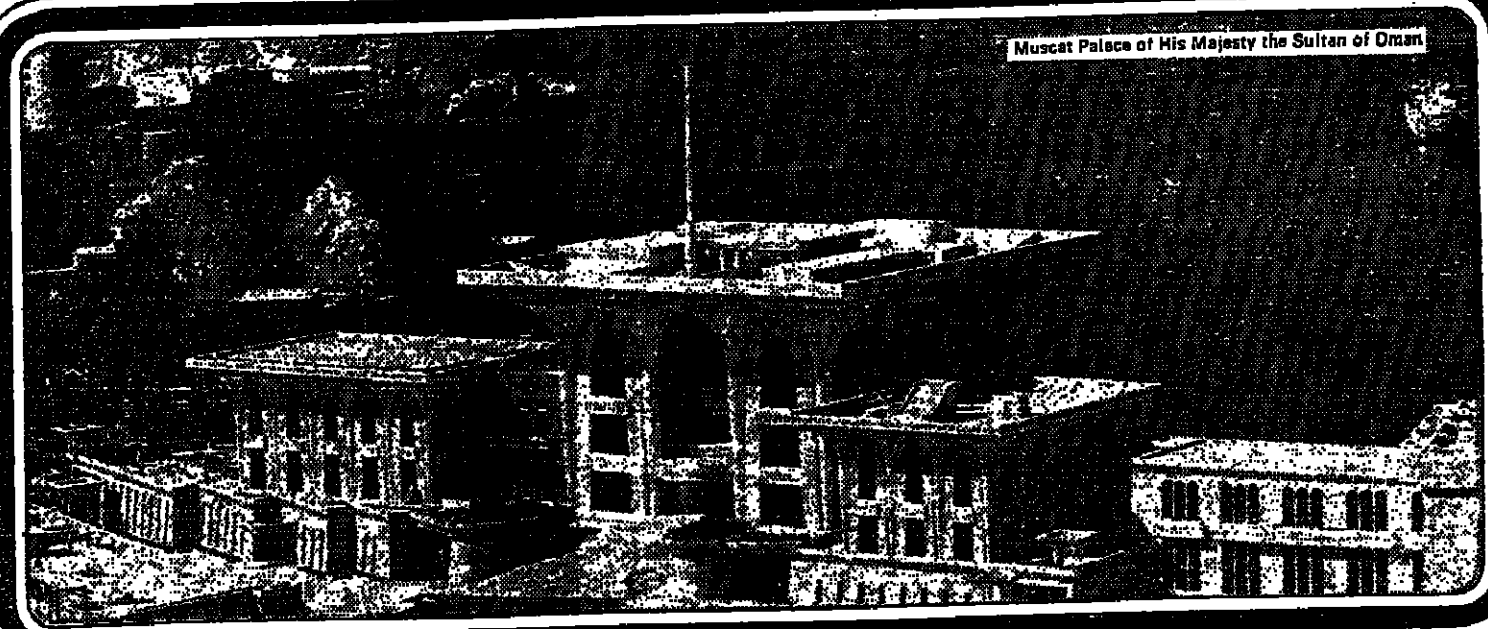


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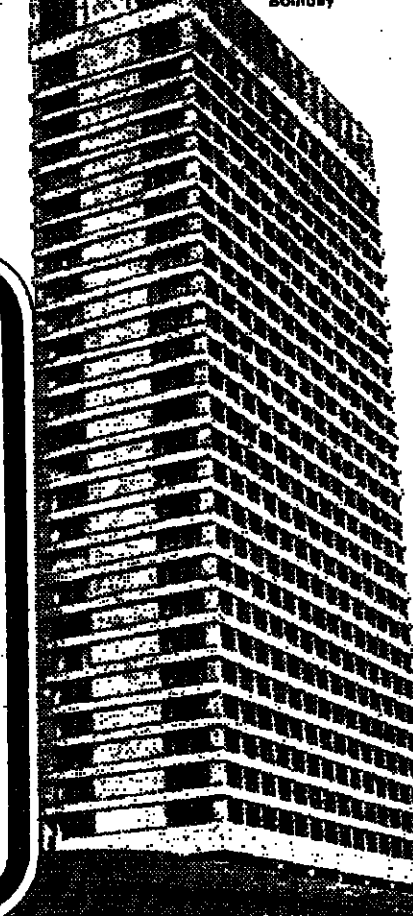
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شاپورजी पल्लोनी

Calcutta: a great need for huge investment

CALCUTTA, THE Manchester of India, is suffering from a number of economic ills, many of them similar to those felt in Britain's industrial north-east.

In spite of a sustained and steady decline from its once-unchallenged position as the industrial metropolis of the Indian subcontinent, businessmen seem to have a confidence about the future that is probably based on the assumption that things cannot get worse.

Calcutta and its industrial hinterland nevertheless stand more to gain from the country's new liberal trading policy than almost anywhere else in India. Fresh investment is needed on a grand scale, and West Bengal's Marxist government is so keen to dispense economic medicine that foreign companies and foreign capital could play a large part.

Most people know Calcutta for its terrible poverty and horrendous overcrowding. It is easy to forget that during the halcyon days of British colonialism, Calcutta was capital of India and the generator of wealth and industry for the whole subcontinent. While its port handled the lucrative trade in tea and jute, large-scale industries, particularly in steel and heavy engineering, grew up around the considerable coal and iron ore deposits of West Bengal and neighbouring Bihar.

It was a city built for 1.5m, but the sprawling metropolitan area covering 240 sq miles along the Hooghly River now holds a population of 1.5m. The narrow streets are choked with the homeless and the beggars, cows and many dogs.

In their midst, huge rubbish tips spread along what once

were pavements, spilling over into filthy gurgling pools that house the city's standees—the only source of water for most people living in the city.

An estimated 100,000 dilapidated taxis weave around the lumbering trams, leaving the man-pulled rickshaws and coolies with handcarts to fend for their lives and livelihoods as best they can.

To make matters worse, a Russian-designed underground railway intended eventually to link Dum-Dum airport in the north with southern Calcutta, is now starting to cut through the very heart of the city, a trench 50 yards wide eating through the densely populated business centre. It is unlikely to be finished for a decade yet, and the chaos it will cause is unfathomable.

Rising cost

While Calcutta has relinquished its position as the foremost industrial centre in India—Bombay and its hinterland overtook it in the early 1960s—it is still a powerful commercial force. Behind only Maharashtra, West Bengal offers twice as much factory employment as any other state. Its port, handling almost 5m tons a year, is the country's biggest behind Bombay.

It is still the home of tea and jute industries. While trade in these commodities has been flat in recent years, there are signs that business is bucking up. The relentlessly rising cost of synthetic fibres, closely linked to oil prices, has given jute products a new lease of life. Demand for tea has spurred, both at home and abroad. Some tea traders now say domestic demand is growing so fast that exports are being squeezed as production cannot be raised fast enough.

The region has had more than its fair share of set-backs. In

1943, Japanese annexation of Burma cut off north east India from its granary. Facing wide-spread famine, millions flooded to Calcutta. Then with the partition of India in 1947, Hindus flocked to the city from the new Muslim state of East Pakistan, now Bangladesh.

At the same time, the jute industry was spliced, with factories in West Bengal cut off from their sources of the raw commodity. It has taken many years to recover from this blow.

Two wars with Pakistan have disrupted this frontier state and created fresh floods of refugees. A strange paradox resulting from these successive influxes is that Bengalis make up a minority in the city's own capital, with just 35 per cent of the population.

Industry was also severely hit by the widespread industrial sabotage associated with the Naxalite uprisings a decade ago. In the midst of industrial chaos and political turmoil, many industrial and commercial houses fled. By and large, their factories remained, but headquarters were moved to Bombay along with the lion's share of subsequent investment.

Reflecting this decline, unemployment probably stands around 6m in Bengal. The state boasts more "sick" industries than any other state—that is, companies unable to pay dividends or no longer entitled to draw credit from the banks. Bengal has around 80 "sick" large industrial units—more than 20 per cent of the country's total.

Aggravating the situation still further, the state has lived through a decade of terrible labour trouble, particularly in the core industries of coal and power. As output from these industries has been hit, so all other industries have suffered. With strikes at an all-time high in 1979—for example, the port was strikebound for about

150 days, at a cost of 100,000 man-days—output has been hit hard. The power stations have produced an average of 25 per cent of their total capacity, leaving many industries without power for between six and ten hours a day.

Ailing plant

Major industries, such as General Electric, lost between 10 and 15 per cent of their capacity in 1979 because of power shortages. Many smaller companies have been losing between 30 and 40 per cent.

Both government and business spokesmen admit that declining output is also due to the inadequacies of aged and ailing plant. Like Britain's industrial north east, Calcutta is saddled with ageing industries and outmoded inefficient technologies. Huge amounts of fresh investment are urgently needed.

This is well illustrated in Calcutta's port, which is separated from the sea by 86 miles of "bars, bores and bends" along the Hooghly river. Wharves, warehouses and loading methods still date back to the 19th century. Recognising this, the Government has built a new port downriver at Haldia. After three years in operation, with a container terminal and an oil jetty, Haldia is using just a fraction of its capacity, because the road and rail network linking it with Calcutta and the region needs extensive improvement.

West Bengal's Marxist government acknowledging these needs, seems keen to provide new opportunities for domestic and foreign investors. India's more liberal import policy offers improved prospects for foreign companies, particularly in the coal machinery and power sectors. New opportunities for foreign investment have been recognised by international bankers, like Lazard and Kleinwort Benson, who have been busy recently assessing prospects according to diplomats in Calcutta.

When the Marxists first came to power in West Bengal in the late 1960s, they aroused alarm throughout the business community. But that apprehension has been doused by what one diplomat called "totally responsible" government. A foreign businessman assured that the



Calcutta street scene: the extremes of Victorian poverty remain commonplace

government of Mr. Jyoti Basu, which won back power in 1977, had done its best to create a "milieu of tranquillity" for business to work in.

Explaining the paradox, Finance Minister Dr. Ashok Mitra claims that revolutionary policies would only be possible if the communists won power in Delhi. In the meanwhile, aiming to consolidate power in West Bengal by showing they can offer more effective government than any other party, the Marxists see higher investment and raised industrial activity as the only means of reducing unemployment and ameliorating poverty.

Jyoti Basu's government has impressed businessmen with the

way it has set about improving labour relations. One foreign businessman confessed that the Government supported the unions in driving a hard bargain in wage negotiations, but once a deal was signed it was proving effective in persuading workers to get back down to work until the next wage round was due. It is indicators like this that have generated a new, if cautious optimism among businessmen in Calcutta.

Hard bargain

Mrs. Indira Gandhi's victory in January's general elections has nevertheless created new uncertainties. West Bengal is almost alone in rebutting Mrs.

Gandhi's Congress party. As the rest of the country has fallen into her palm, so one independent observer anticipates that there will be "an almighty showdown sooner or later between Mrs. Gandhi and the Communists (in West Bengal)." One diplomat felt "a treak and dangerous situation at the moment."

It is rumoured that 10,000 Communist Party cadres have already been sent underground and that a second rank of party leaders has been selected in anticipation of the current leadership being arrested and jailed.

In theory, businessmen should be keen to see Mrs. Gandhi resume power in West Bengal. In

fact, few relish the prospect. Not only do they feel they have at last reached an effective working relationship with the Marxist government, but they also have no love for the Congress party, which has traditionally played a disruptive and irresponsible role in the region.

So, like those states in India now languishing under President's Rule, Calcutta awaits Mrs. Gandhi's next move. Most feel that if she leaves the Marxist government alone, then the region can look forward to better days ahead. If she chooses to be vengeful, then chaos is inevitable, and Calcutta's economic decline will continue unchecked.

David Dodwell

Bombay bursting at the seams

BOMBAY, gateway to India for traders since the 18th century, is a city bursting at the seams. Its ageing port can no longer cope with the volume of trade needing to pass through it, while the city, trapped by the sea on the peninsula where it was first established, can barely provide the most basic amenities for its burgeoning population. At the undisturbed hub of Indian commerce, and at the centre of the country's fast-growing industrial heartland, one would expect to find businessmen brimful with confidence—particularly following the victory of Mrs. Indira Gandhi's Congress Party in the recent general elections. It is widely believed that Mrs. Gandhi's government will be sympathetic to big business.

Instead, one hears complaints that the cost of living—particularly the cost of housing—has soared, that industrial unrest is on the rise, that crime is increasing, and that basic public services are deteriorating as the city becomes too unwieldy.

Garbage piles up even in the smartest residential areas. Power cuts are an everyday occurrence. Even the grandest buildings seem to have seen better days. There are now an estimated 500 slums in the city, while a huge population lives in squalor on the pavements.

Bombay is almost completely a creation of British colonialism. Ceded to the Portuguese by the Sultan of Gujarat in the early 16th century, it came into British hands as part of the dowry given to King Charles II when he married Catherine of Braganza in 1665. Bombay was then a series of small islands, but the British joined them up by land reclamation, then set up a fort and a trading post.

Sabotage

The city was soon one of Asia's biggest sea ports, getting a big boost in 1869 when the Suez Canal was opened. A huge textile industry grew up around the city, while the hinterland, now the state of Maharashtra, a host of new industries has mushroomed, such as chemicals, pharmaceuticals and heavy engineering.

Manufacturing industry in the area has received several recent boosts. First, over a decade ago, an outbreak of industrial sabotage in the north-east of India led by the Naxalites prompted a flight of investment away from Calcutta and West Bengal over to the west of the country.

Second, Bombay found itself perfectly placed to plug into the oil-based prosperity of the Middle East. Finally, the discovery of oil offshore catalysed the rapid growth of industries based on petrochemicals, and involved in the manufacture of products like fertiliser and cement.

The pre-eminence of Bombay and Maharashtra in Indian industry are easily illustrated. The state provides 18 per cent of the country's factory employment, and has almost 19 per cent of the nation's invested capital. It provides a quarter of the gross output and value added of Indian industry.

Bombay alone pays 33 per cent of the country's income tax, and 50 per cent of all central excise duties.

The headquarters of all domestic banks—including the Reserve Bank of India—and of most foreign banks have now settled in Bombay. Many, like the Mercantile Bank and the Chartered Bank, have recently shifted headquarters from Calcutta in recognition of Bombay's position as the country's commercial capital.

While the city's backbone industry—textiles—has had a lean time in recent years, both because of a depressed world market and because of mounting need to replace antiquated machinery and factory methods, other industries have grown rapidly.

This includes chemicals, pharmaceuticals like Pfizer, Glaxo and May and Baker, heavy engineers like Larsen and Toubro, and electronics in the new SEEP Zone. A substantial construction industry has mushroomed under the stimulus of business in the Gulf states.

Even companies with most of their operations far from Bombay tend to establish their headquarters there. Tata Engineering and Locomotive Company (TELCO), for example, with its operations in Bihar and the giant Birla group with factories all over India, have headquarters in Bombay.

Mounting physical congestion in Bombay itself has forced industries to set up operations further and further from the metropolis. A dense industrial belt now stretches south west all the way to Poona.

It is not only Bombay's favourable geographical location and its leading role as a port—handling 15m tons of cargo a year—that has attracted investment. It has established a reputation for high entrepreneurial skill and responsiveness to new industrial investment, and has a large reservoir of skilled workers.

More than 30 per cent of foreign investment in India is focused on Bombay and its hinterland, though foreign investments make up only a tiny part of total investment in the area.

For all the industrial growth seen over the past decade, industrialists seem to feel things could have been better. They have been dogged by a "economic drift" during the past three years of indecisive Janata rule. Dissolution of the state government and imposition of President's Rule by Mrs. Gandhi just a month ago means they must live with uncertainty for several months to come.

Many industrialists appear nostalgic for the "first rule" of Mrs. Gandhi's emergency period, which effectively eliminated most labour disputes and helped them to reap high returns from improved output levels.

Rising costs, particularly for property, are heartily resented. Mr. Pandit claims: "No one who earns his living honestly can afford to buy his own home unless he is prepared to live far from the city." With pro-

perty prices around Rs 500 per square foot in the middle of Bombay, even Rs 600,000 will only buy a two-bedroom flat. Many are forced to live 20 and 30 miles out of Bombay.

As a result, traffic congestion on the single spinal road to the business centre at the south of peninsula Bombay is appalling. Queues rarely clear before 8.30 in the evening. The commuter subway carries 1.4m people a day and is so congested that many commuters are now catching the empty outgoing trains in the morning as the only way of getting to work when they turn round and travel back to the city from the northern terminal.

Huge exodus

The population of greater Bombay has been growing at a rate of 40 per cent a decade since 1950. From fewer than 3m, the population is now close to 8m. Most of this population lives in squalor and poverty. A huge number live under sacking along the pavements in conditions akin to those in refugee camps on the Thailand border with Kampuchea. Few have any hope of permanent employment.

While these people suffer, so the wealthy feel they are suffering too, mainly because of a huge exodus of workers to the Middle East. These people would once upon a time have been eager to earn a living as servants, but the exodus means that servants are increasingly difficult to get. So too are craftsmen like carpenters, mechanics and plumbers, who have found they can earn handsome livings in the Gulf states.

At the heart of Bombay's problems is its ageing port. Built to cope with the clippers and early steam ships of the 19th century, the port is quite incapable of coping with the demands now being made of it. The dock entrances are too narrow for large modern ships, and the water is too shallow.

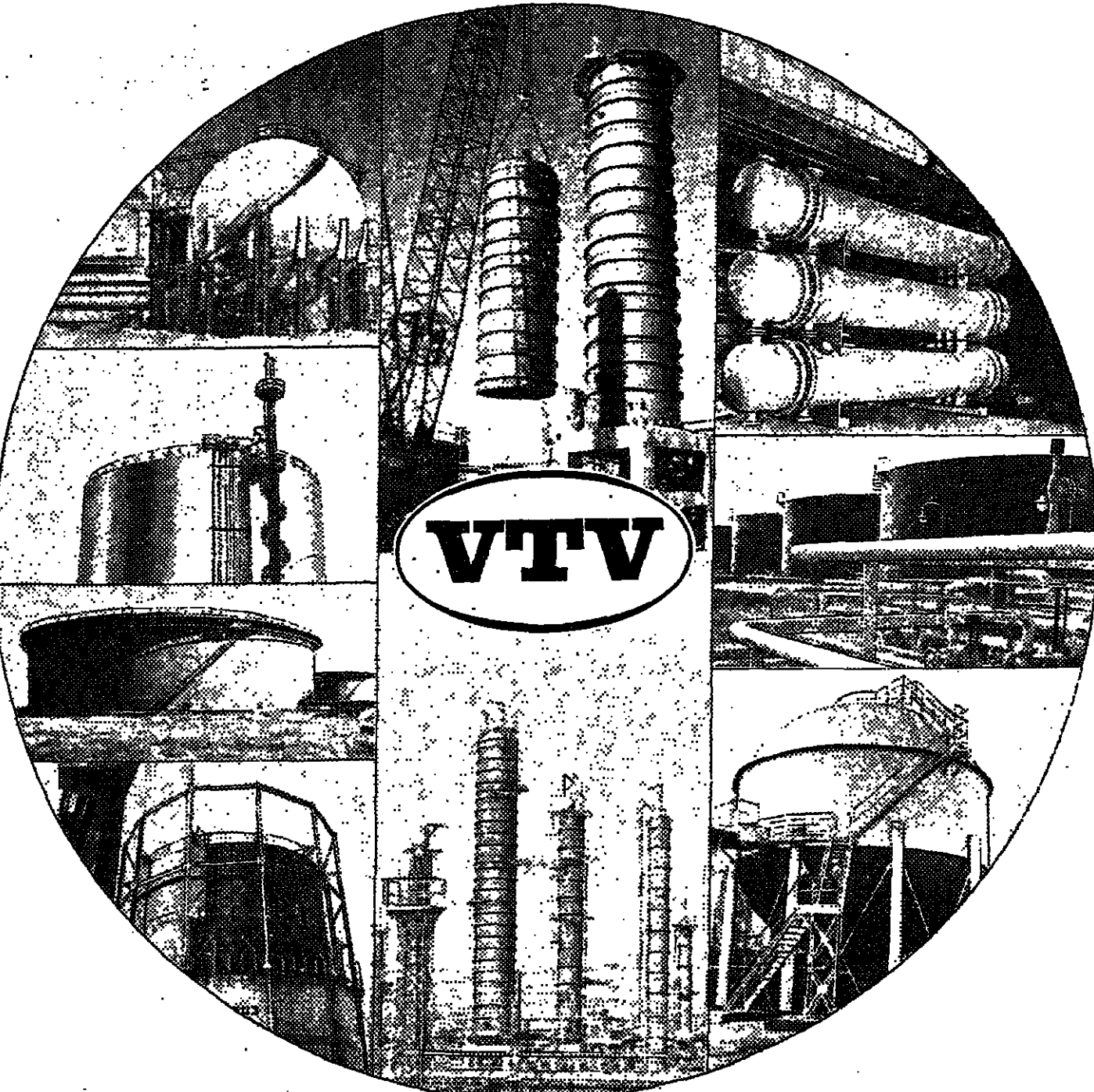
The most modern cranes date back to the 1930s, and most cargo is loaded and unloaded manually. Warehouses will collapse, of their own accord unless they are demolished soon. Nor can one ignore an appalling record of strikes, go slows and general industrial unrest.

These shortcomings have resulted in hopeless congestion. At its worst, ships have had to wait for 80 days before being unloaded. Bombay's container capacity is tiny, and the container traffic is nothing short of chaotic.

Hope that a new port will be built nearby at Nhava Sheva have been frustrated for ten years as the authorities in Delhi have dithered. There are signs that Mrs. Gandhi's Congress government is ready to give the green light but even optimists say the port cannot be operational for at least five years.

A new port would mean a new lease of life for Bombay itself, and for its vast industrial hinterland. With such a new lease of life, the whole of India stands to gain.

David Dodwell



VTV's role in Oil, Petrochemical and Fertilizer industries

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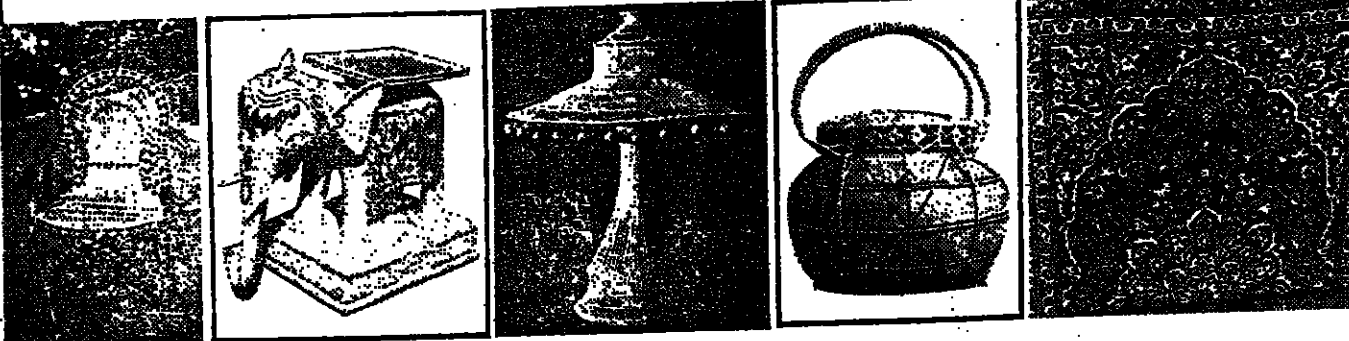


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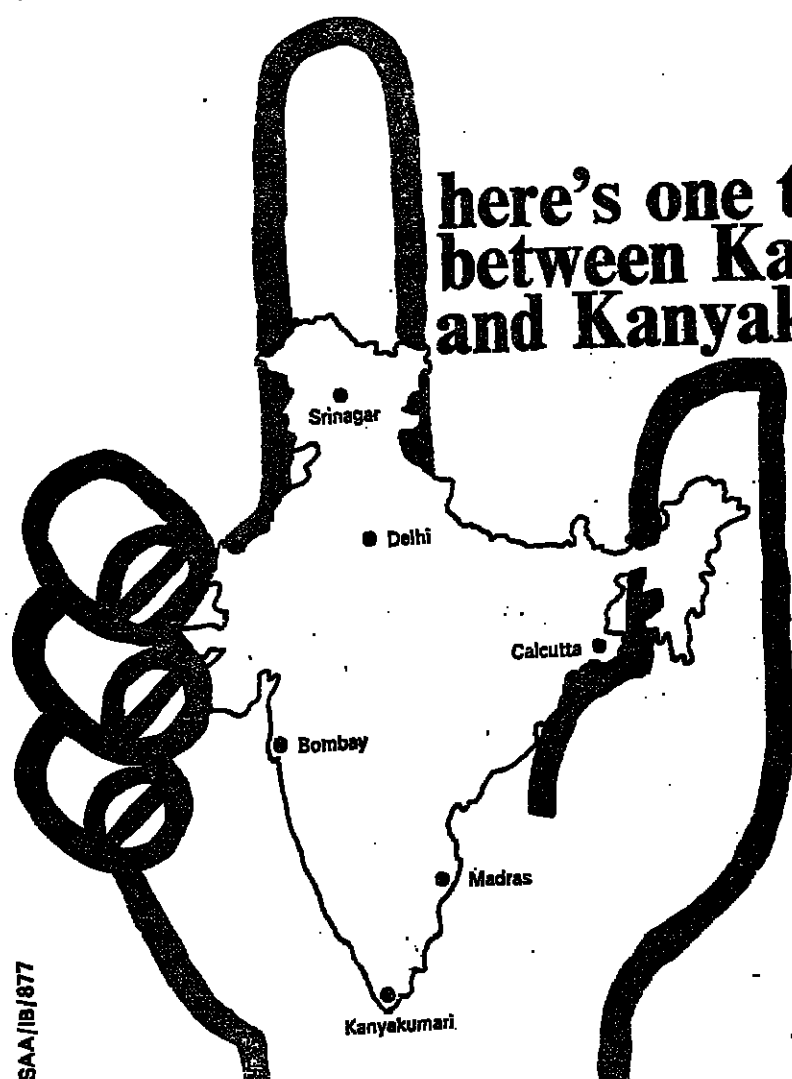
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COMMERCIAL CENTRES

Influx of industries changes Bangalore

ONE HIGH-RISE skyscraper already dominates the skyline of Bangalore's commercial area in the vicinity of Mahatma Gandhi Road and another is fast going up nearby. Many Bangaloreans, looking back with nostalgia at their city's reputation as an urban garden, regret this intrusion of modern commercialism. Others point to it with pride, claiming that the 20-storey structures symbolise Bangalore's ascent into industrialisation and its new position as a centre for industry and trade in India's south.

Bangalore, capital of Karnataka State, has certainly grown rapidly in the past couple of decades. It still does not match Madras as the main business centre in the southern region, but after all, Bangalore is landlocked while Madras is one of the country's major ports—but business is booming.

Its statistics are impressive. Nearly 50 per cent of the engineering goods exported from the southern region originate from Karnataka and this is a major index of the industrial progress that the State has made. It also explains why Bangalore, its capital, is fast asserting its claim to be the focus of business in the south.

Perhaps the importance of Bangalore began with the decision to locate at least five major public sector industrial units there. This was meant to industrialise what remains essentially an agricultural State but it triggered the growth of ancillaries and feeder industries. Local businessmen were able to cash in on what they call the "spin-off effect."

The major public sector units are the Hindustan Machine Tools, Hindustan Aeronautics, Bharat Electronics, Indian Telephone Industries and Bharat Earth Movers.

Garden city

Each is a recognised profit-making giant with tentacles now spread over many other parts of the country and Bangalore is justly proud of their achievements. More public sector units have come to Karnataka—the \$650m Kudremukh iron ore project is the latest and most important—and, combined with the growth of large, medium and small-scale units from the private sector, have converted Bangalore from a somewhat sleepy "garden city" to a major business centre where modern problems such as pollution are beginning to emerge.

Bangalore owes its growing importance partly to the fact that it is the capital of an acknowledged progressive and rapidly economic advancing State. Like other States in India where bureaucracy rules supreme, industrial units and business offices are attracted to the fountainhead. But it also reflects the economic development that has consciously taken place.

The State remains predominantly agricultural and income from industry and mining is estimated roughly at no more than 12 to 15 per cent of its total. But it has exploited its abundant natural resources such as iron ore, manganese,

chromite and the like, used its favourable climatic environment and usually magnificent monsoon (which has endowed Karnataka with abundant forests) to surge ahead.

Karnataka has made considerable progress in several sectors in the past two decades. Its high irrigation and power potential, minerals, diverse soils, skills and industrial traditions have been exploited by a combination of infrastructural development, institutional network and incentives—although there are inevitable complaints that much needs to be done under each of these headings.

Industrialisation began in Karnataka slowly and has picked up momentum only in the past two decades. Nevertheless, its first textile mill was established in 1884, its first hydro-electric power station (also the first in India) in 1902 while the Bank of Mysore began operating in 1913.

One of the State's main industrial projects still, the Mysore Iron and Steel Company (now renamed Srisastrya Iron and Steel) was launched as long ago as 1918. In the early part of the century smaller units in sectors such as sugar, tanning and sandalwood started appearing and in the second the major public sector companies followed. In their wake came such major successful private ventures as Kirloskar Electric and Mico. Foreign investment followed and is growing, although slowly.

The effect of industrial development can be judged from the fact that the number of large units in 1920 was just 29 with a total investment of Rs50m, giving employment to only 17,000. By 1944, it had risen to 605 units employing 78,000 people. Since then, the public sector giants have emerged and are growing, as are the other large and small units in the private sector whose plants belch smoke inside and on the outskirts of a growing and now sprawling Bangalore.

Leading private companies, apart from Mico and Kirloskar, include Indian Aluminium, Larsen and Toubro, Associated Cement, Binny Mills, Ballapur Paper Mills, Mangalore Chemicals and Fertilisers and scores of others. By 1975-76, the industrial turnover of Karnataka had reached Rs8.5bn and estimates are that it must be over Rs10bn now. Of this, a total investment of Rs3bn has come between 1972-73 and 1976, a period that added 119,705 people to the industrial workforce.

The Government has consciously promoted industrial estates and small industry. Fresh investment in the small-scale sector in this period was about Rs750m and there are now just under 20,000 small units registered in Karnataka although, like the rest of the country, not all are doing what was hoped of them.

Even more striking is the growth of ancillaries: Karnataka accounts for nearly 50 per cent of the new ancillary units in the country in the 1970s, partly because the public sector giants and partly because progressive units like the Mysore Paper

Mills have deliberately encouraged their growth.

Also helping them are such institutions as the Karnataka State Financial Corporation, the Karnataka State Industrial Investment and Development Corporation, Karnataka Industrial Areas Development Board, Mysore Sales International and hosts of others.

Together, they encourage entrepreneurs by providing concessional finance, underwriting public issues, preparing project reports, making technoeconomic studies and helping to establish industrial estates and sheds. Mini industrial estates are an integral part of Bangalore's business life. The Peenya industrial estate, located there, is the largest in the country.

An indication of Bangalore's importance is the share of its exports. It maintains its traditional exports (coffee, sandalwood products and so on) and to these have been added modern sophisticated engineering and electronic items. Exports increased from Rs 400m in 1971-72 to Rs 1,080m in 1975-76. Once the Kudremukh iron ore exports get going the figure will swell significantly.

Exports have been helped by agencies specially created for the purpose—such as the Coffee Board and the Central Silk Board—and Bangalore has now been put on the air cargo map by the opening of an air cargo complex.

Growth has been helped by the location of a number of key research institutions which improve products and help entrepreneurs to gain access to modern technology. Some have come up due to defence requirements to help the many ordnance factories. But also in Bangalore are the National Aeronautical Laboratory, Central Machine

Tool Industries, Indian Institute of Science, the Indian Space Research Organisation and the Indian Scientific Satellite Project.

For example, the Central Food Technological Research Institute, Mysore, develops and provides knowhow for the industrial use of a number of items in the food industries. In the past 25 years it has developed about 120 products for which technology has been made available to Indian industries.

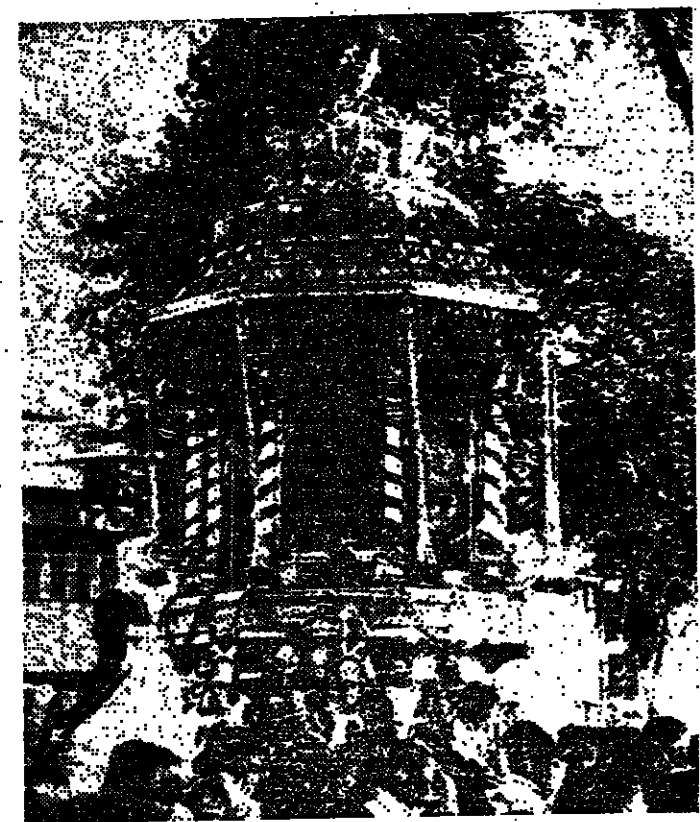
Irrigation

Bangalore thus has a number of advantages, natural and man-made. But it has its share of troubles. Inevitably, like the rest of the country, businessmen complain of infrastructural constraints. Unavoidably, power heads the list and cuts in supply and load shedding are constant sources of irritation.

Businessmen also complain of other infrastructural bottlenecks such as the lack of proper rail transport (Karnataka has mostly metre gauge, single-line tracks), narrow roads and the delayed introduction of a rural development programme to provide support to industry. Remedial steps are being taken slowly. Yet Karnataka has an obviously growing importance and a number of new investment opportunities have been identified.

Among these is a commercial vehicles factory with a capacity of 50,000 vehicles a year, a heavy fabrication unit to manufacture wagons and cranes, a tractor factory with a capacity of 10,000 tractors, high-precision investing casting units to cater to the needs of the public sector Hindustan Aeronautics, and a host of others.

K. K. Sharma



Religious procession in the streets of Bangalore

Scars of progress show in a Punjab town

LUDHIANA TOWN centre shows all the scars of rapid progress. The massive clock tower stands sentinel as a memorial to more sedate times while at all hours of the day and well past dusk a chaotic traffic jam crawls around the town. There are gliding new tractors, overloaded lorries that look as if they might give way at any moment in a pall of filthy exhaust smoke, whizzing bicycles, snarling motor cycles, straining buffalo carts, trotting tongas, and men sweating and grunting pushing carts laden with scrap over the potholes.

There are the mingled smells of any Indian town, but there is also the dust of the Punjab and the acid smoke of industry to add to the pollution. For Ludhiana is one of the success stories of India's industrialisation. It long ago burst beyond the seams of the sleepy agricultural market town of 20,000. It was when the British left, and indeed was until the mid-1950s.

Along all the roads to the clock tower is a profusion and a confusion of tiny workshops, foundries, forges, wire works, motor car and cycle accessories, tool makers, nesting under the shade of some bigger factories, including hosiery and textile makers, and factories producing bicycles, sewing machines and electric fans.

Ludhiana is also an exporting town in a considerable way as well and was a storybook success until recently. Now the factories are in difficulty because of power shortages. Most

industrialists spoke of savage power cuts. "We only have assured power for six hours a day and six days a week," said Avinash Rai, a partner of Rita Mechanical Works which makes sewing machines. York Hosiery Mills said the cuts were 16 hours a day. But both factories have their own power generators, even though their use puts up fuel bills 2½ times. The smaller workshops are harder hit because they cannot afford their own generators.

The town presents a classic case of growth through small-scale units feeding into bigger ones. It also shows the importance of a general well spread level of prosperity. Ludhiana lies at the heart of the Punjab agricultural area where the green revolution has been most successful and the farmers are the richest in India. Even in this year of drought and power cuts the irrigation canals have ensured that the fields are full and green. At night the roads become cluttered with a procession of tractors going home.

Workplace

Many of the small workshops are employed directly in carrying out orders for the bigger ones. And at York Hosiery Mills managing directors, Balraj Kumar and G. C. Dhawan, said that many of the 2,000 people the factory employs "bring their own machines and we simply provide them with a workplace."

Others still work from home and such workers may make up

to Rs 50 a day, a large sum for India. To an extent the prosperity has been shared with the rest of India as more and more jobs have been created, too many for the local Punjabis to fill. Many of the drivers of the cycle rickshaws are migrants from Uttar Pradesh and Bihar, other Indian states which have a surfeit of unemployment. Building workers are also typically migrant.

It is also easy for an outsider to notice flaws in the boom and the opportunity for improvement—apart from the need for the municipal and social services to catch up.

For Hero Cycles, there could be an improvement in technology. The machine is strong and sturdy, but it is an example of India building for developing countries. It is basically a heavy machine with few of the refinements such as gears, and a lighting system, let alone fashionable design or fancy handlebars which have become standard in the West. For an importing country seeking a serviceable bicycle it is good, but the moment an importer gets richer or fancier ideas the Hero could be left behind.

For the Rita sewing machine company, exporting is a challenge. It is also a necessity as the licence forbids the company from producing more than 40,000 sewing machines a year for India and production is more than 120,000 machines a year. But even when Rita has produced the machines with all the difficulties of power and

reliability of raw materials, getting them out of India has presented problems. The nearest port, Bombay, is hundreds of miles away and there are constant problems with delays to shipments.

Altogether, according to Mr. Rai, the owner, "Transport costs should be between 5 and 7 per cent of production, but taking into account congestion and delays and extra charges at the port they come to between 20 and 25 per cent. There is a need for a dry port somewhere in the region."

Delegation

For York hosiery, as for much of the fast-growing textile industry in Ludhiana, prosperity depends on the annual delegation from Moscow signing a big order. The Soviet Union takes more than 90 per cent of York's Rs 55m (£3m) annual production, as it takes a similar amount from other woollen mills in the town. So far everyone is happy.

The owners, Mr. Kumar and Mr. Dhawan, said: "Business increases by 5 to 10 per cent a year. They don't give us a chance to diversify to other markets." But it might be a matter of concern that one reason why York is so happy is that the Russians buy in bulk so the company does not have to worry about changes in fashion or whether it is merino or Fair Isle or Shetland or mohair which is the current favourite wool.

Kevin Rafferty

Demands of the economy put pressure on railways

INDIA'S 8,000 steam locomotives may be a delight to the world's train-spotting enthusiasts, but they are the hallmark of an ageing industry and symbolic of an increasingly serious failure to meet the demands of this rapidly growing industrial nation makes on it.

One Western economist who has recently studied India's rail transport problems explained: "Overall, India has an efficient railway system by almost any criterion you care to mention; it fares well against any country in the world. It is just not big enough to cope with the demands the Indian economy is making on it."

Shortcomings have been highlighted this year by extreme pressures, some inevitable and some avoidable. But the net result is that India's Railway Board expects to make a loss in the current financial year of between Rs 500-600m. This is the first year in the red since 1975, and compares with profits last year of Rs 367m and in 1977-78 of Rs 1,265m.

Tumbled

The basic reason for the slump into deficit is simple: traffic carried has tumbled from an expected 222m tonnes carried last year, and more than 210m tonnes carried in the two previous years.

A number of peculiar factors have clouded this year's performance. Severe cyclones in Andhra Pradesh last summer severed the country's north-south railway links, disrupting services for almost three months according to Mr. Mammal Menezes, the Board's chairman. There was also severe labour trouble in West Bengal and Bihar, which originates about 50 per cent of the railway system's traffic, most of it coal. At the same time, hundreds of wagons were trapped during disputes in the coalfields, and in places like Calcutta port.

Labour disputes in the country's major ports, coupled with severe congestion in Bombay, the largest port, immobilised further wagons and trapped import cargoes at the docks. Many shippers attempted to sidestep the strike-bound ports by unloading elsewhere. This not only meant that imports had to be carried

over much longer distances, but put extreme strain on rail and road networks around minor ports which were inadequately equipped to cope with the extra traffic.

When the ports were operating they provided extra problems because a heavy import programme of steel, coal, cement and fertilisers was initiated by the government to meet shortages in the country, and most of these goods had to be transported by rail.

The Board constantly complained that coal cargo—which accounts for about 30 per cent of total traffic—included up to 25 per cent extraneous matter—ash, sand and stones and so on. If coal was washed at the pithead before loading, the Board insists this would have provided considerable relief to their overstretched resources. As all these problems were compounded, so there was an acute shortage of wagons and a vicious circle of hold-ups built up. Coal industry spokesmen claim that the wagon shortage was so great at one stage that 15m tonnes of coal stocks built up while industries throughout the country were crying out for coal.

In addition, there was a real fall in rail cargo from factories as industrial stagnation settled on the country. There has been an estimated 4 per cent fall in industrial output in 1979-80. There was also a fall in export demand for iron ore. Between them, all these difficulties affected traffic volume over the year.

Problems were aggravated by declining efficiency on the railways. Train turn-round times deteriorated from an average 13 days to 15.6 days during the year. Punctuality—measured as the number of trains that leave and arrive on time—fell at one point to 82 per cent. It has since recovered to 89 per cent.

Some of the extra strains on the railway system no doubt can be accounted for by the fact that the average length of freight journeys increased by 3 per cent to 743 kms. This was in part due to long hauls of coal from the eastern coalfields in West Bengal down to Maharashtra and Gujarat, and of grain from the Punjab to Haryana and Kerala.

India's railways include both broad gauge and metre gauge track, which creates inefficiencies. Trains travelling on metre gauge have to travel more slowly and cannot carry such large loads. Time is also lost in transshipping cargoes from trains of the main broad-gauge tracks to metre-gauge trains. Fourteen major routes are currently being converted to broad-gauge track.

More than 8,000 of India's 11,000 locomotives are steam-powered. There are 20,000 diesel trains, and the railway Board has only 1,000 electric-powered trains, which are considerably more efficient to run. Foreign experts calculate that freight cost using electric trains is less than half those of steam locomotives.

Still running

Steam trains have not been built in India since 1971, but Mr. Menezes predicts that many of these will still be running by the turn of the century. The Railway Board cannot afford to replace them at a faster rate, he says.

All of these problems would not be so crucial if India's road system were better. As coal shortages have become critical, more and more coal has been carried long distances by road. Almost 25m tonnes—about a quarter of total production—will have been carried by road this year.

But road transport costs are alarmingly high—between six and 10 times those of transport by rail. Economists calculate that while the railways are capable of carrying 50,000 tonnes a day, the best that can be expected of road is 3,000 tonnes.

The railways can improve their performance on a small scale by reducing turnaround time and increasing the rate at which wagons are loaded—particularly coal wagons.

Between November and mid-February, an average of just 8,800 wagons of coal were being loaded every day. A directive from government to improve this has raised daily loading to an average of 9,500. Thermal power stations in urgent need of extra coal, have in the past month received an average of 3,600 wagons per day, compared

with about 3,000 in the four previous months. Power station stocks have doubled in the past month to 150,000 tonnes.

A similar improvement in productivity has been reported for oil. While loading has stayed steady at 1,600 wagons a day, loads have been carried an average 20 per cent further in the same time—about 750 kms. The increase in productivity is closely linked to a new productivity-linked bonus scheme agreed with the railway unions late last year which will cost the Railway Board about Rs 370m. Industrial relations are certainly much improved from last summer, when a long go-slow nibbled away at production.

While these changes can bring some gains, foreign experts believe that the only long-term solution lies in heavy investment and, most crucially, electrification. One authority said: "Electrification is the single most important factor in improving India's railway system. Everything else will provide only temporary and marginal relief."

"While India is a huge country, its transport problems are not so complex. You just need much more of the same stuff—more trains, more wagons. In the end you have just got to take a deep breath and go ahead and make the investment."

At present, less than 8 per cent of India's 61,000 kms of railway track is electrified, so there is a long way to go before even all the major routes are converted. The Government allotted Rs 6.5bn for capital investment in 1979-80, but there is no certainty that this will be increased substantially in the year ahead.

Investment levels

There was an estimated shortage of 30,000 wagons in 1979, but only 13,000 new ones were brought into operation, all of them manufactured domestically. Investment levels will have been hoisted a long way to breach this gap.

The World Bank has agreed a loan of \$190m for railway modernisation, which will be of considerable help. But little of this cash is likely to be spent in the near future. By 1982 the railways will have

to carry in the region of 320m tonnes a year—about 60 per cent more than is carried at present. Of this, 35 per cent is likely to be coal, and 14 per cent steel.

One foreign expert predicted: "If the economy is to grow at all fast, then the railways just have to be improved. Otherwise, the situation is going to deteriorate from serious to ridiculous in no time."

"It will take some time before current investment pays any dividends, so in the meanwhile they will have to do what they can by improving labour efficiency, reducing turnaround times and trimming the average length of journeys. Basically, the country is going to be very hard pressed for at least three or four years to come."

David Dodwell



Overcrowded public transport, like the buses pictured above, means that as many passengers travel on the roof as inside

Chronic power shortage costs industry dear

SOMEONE HAS switched the lights out on Indian industry. As power shortages have become endemic, so the authorities are beginning to count the cost, and they estimate that erratic power supplies are costing industry about Rs 5bn a year.

With electricity supplies falling short of demand by about 20 per cent, every sector has suffered. Coal mines, steel plants, fertiliser factories, in fact, every area of industry has been disrupted. Farmers have in parts been rationed to four hours of electricity a day, and households—where they have electricity at all—have suffered similar black-outs. Even tourists in exclusive hotels, such as the Grand in Calcutta, have been hit, as diesel generators installed to bypass power cuts have been starved of fuel.

Power shortages have been a fact of life in India for at least a decade, both as a result of low productivity from power stations, and because of failure by the Government and power authorities to anticipate the rapidly-growing demand.

A team of foreign economists in a recent report on India's power industry, talked of "the exceptional rate at which reliance on electricity has grown"—about 10 per cent a year since 1960. India's power generation has grown at an annual rate of 5 per cent, which would be reasonable in many countries, but clearly is insufficient in India.

Many blame the current extreme shortage on monsoon failure in 1979, which has hit hydro-electric power output. But experts disagree: "The fall in hydro-electric output is a marginal problem which comes on top of a more structural problem—the shortage of thermal power," said one independent expert.

Only Kerala and Orissa have anything like normal supplies of power. Elsewhere, cuts vary from 8 per cent in Gujarat, to 100 per cent for 7-15 days a month for industry in Uttar Pradesh. In recent weeks, the three states of West Bengal, Rajasthan and Maharashtra have been the worst hit.

In Rajasthan, all heavy industry has been closed down, with domestic users limited to between 8-17 hours of power a day. At the end of February, the West Bengal government closed down all heavy industry for a period of three days and power supplies have been erratic since then.

Mines closed

While heavy power users like steel, fertiliser and cement plants have been particularly hard hit, West Bengal's coal industry is perhaps the most crucial casualty. In the eastern coalfields, three mines have been closed in the Raniganj area. Most mines face cuts of at least six hours a day.

During last summer's monsoons, about one sixth of all coal mines in India were closed because power cuts made it impossible to pump out water. The situation is likely to be even worse in the coming year unless power supply improves.

The government estimates that 6m tonnes of coal output was lost through power cuts in the nine months to January 1980.

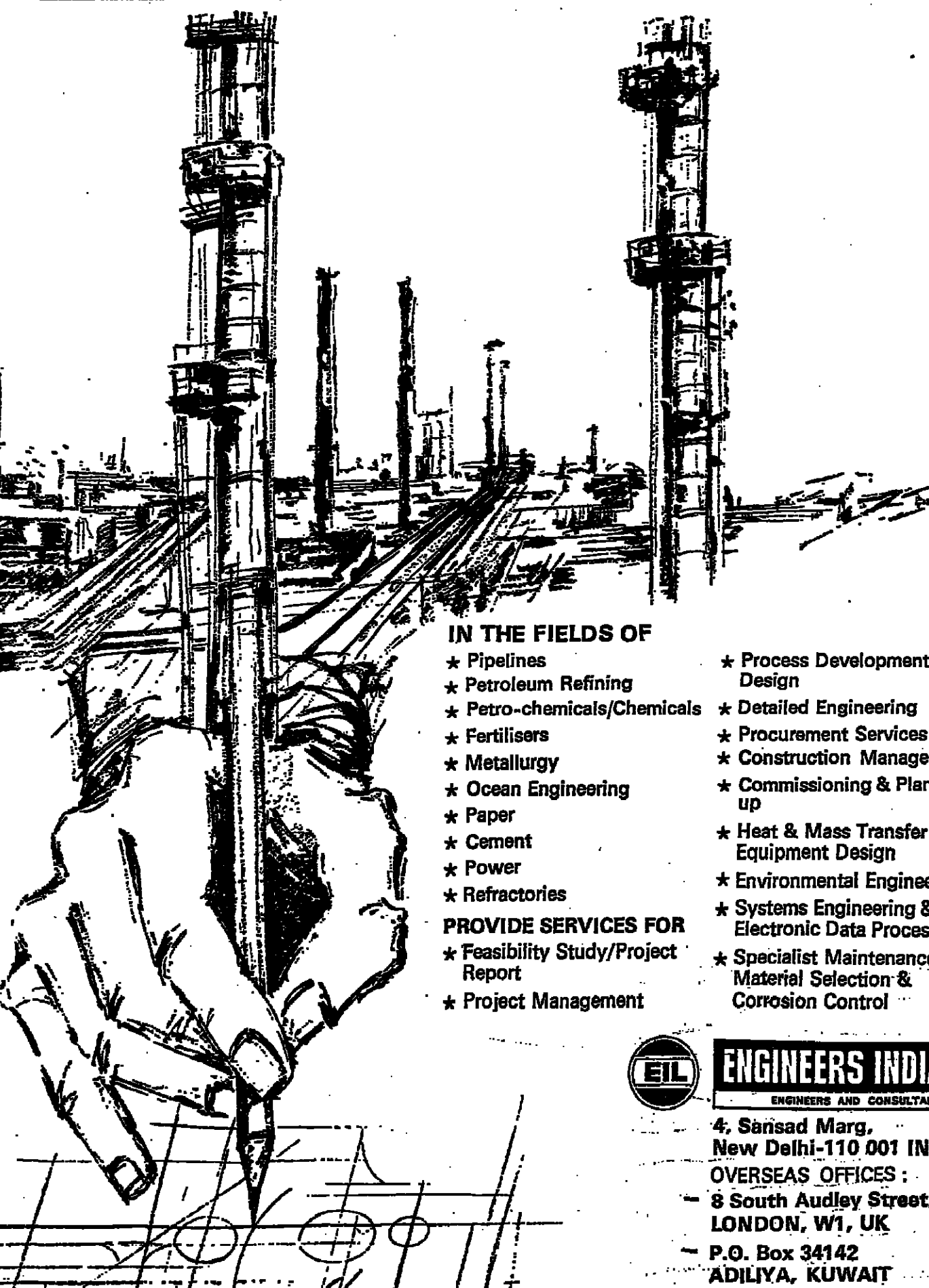
In the three months ahead, problems are likely to be compounded, first, because farmers will be using large amounts of electricity to pump water to crops growing in the fields, and second because hydro-electric power is unlikely to rally until the next monsoons arrive.

In the past, large companies have been able to override power shortages by installing their own "captive" diesel generators. But a critical shortage of diesel fuel has now closed this "escape route." An executive in a multi-national electrical company admitted that about 15 per cent of output had been lost in the past year, even with diesel power used as a back-up. His company is probably typical of large companies, while smaller factories without any diesel back-up are losing between 30 to 40 per cent.

As a stop-gap measure, the

CONTINUED ON NEXT PAGE

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INFRASTRUCTURE

Import programme puts strain on ports

CONGESTION IN India's ports is costing the country dearly, not just in lost exports and delayed imports, but in penalties and surcharges imposed on shippers. In 1979, an estimated Rs 10bn (\$549m) was lost in shipping surcharges, demurrage costs and export losses. In a three-month strike at Calcutta port early last year, Rs 900m was lost in jute exports alone.

As the country sets out to encourage a more liberal import policy, so there is an urgent need to boost port capacity and reduce delays. Talk of new investment in ageing ports such as Bombay, and in a number of newer ports is widespread, but detailed policies are still awaited.

Total traffic passing through India's ports rose by 12 per cent in 1979 to over 70m tonnes and was worth Rs 120bn. But Bombay, the country's busiest port, handling around 16m tonnes a year, was hopelessly congested. In November last year, 18 ships were waiting to berth, and the average waiting time was 41 days. The backlog has now been cut to three ships, and waiting time to about 10 days.

The position has been little better in Calcutta, where 24 ships were waiting outside the port in November, with an average waiting time of 26 days. This backlog has also been trimmed back so that only five ships are now waiting.

Dr. Subrata Ray, director of planning and research at the Bombay Port Trust, explained how a 12-day strike in May 1977 started with just two ships waiting and ended with 44: "We have never really managed to make up the backlog since then," he said.

The inefficiency in Indian ports is no doubt one of the reasons why one strike can have such long-term consequences. While in many countries, ships expect to be unloaded at a rate of 2,500 tonnes a day, in India, the average is 200 tonnes. Low productivity means that in Calcutta, the cost of handling cargo now averages rupees 145 a tonne—Bombay, which averages Rs 23, is far from cheap.

Severe strain

A heavy import programme of essential commodities has also put severe strain on the country's ports. More than 18m tonnes of oil have been imported in the past year, while shortcomings in the country's coal industry have meant the import of 1.5m tonnes of coking coal, and millions of tonnes of steel, fertilisers and cement.

At the same time, iron ore exports, mostly to Japan, remain about 18m tonnes a year. A foreign economist investigating the workings of India's ports nevertheless asserts that there is no basic under-capacity in the country. He claims that only Bombay is genuinely inundated with more traffic than it is equipped to handle.

Bombay port was opened 109 years ago, and has barely changed since. A tremendous expansion which destroyed a large area of the port in 1944 was passed over as an opportunity to enlarge or modernise it. It now has 45 berths, just seven of them added since the first steam ships arrived in 1873.

A large proportion of its traffic consists of bulk cargo: imported fertilisers, fertiliser raw materials, vegetable oil, crude oil and petroleum



Unloading a cargo of rice in Calcutta docks

products, and exported sugar, oilseeds, iron and steel. Textiles, engineering products and marine products make up a smaller proportion of exports.

In many countries, these bulk cargoes have long since been containerised. Indeed, Bombay is the country's leading container port, handling around 39,000 tonnes last year. But this accounts for only a fraction of Bombay's bulk traffic, and by all accounts the port is hopelessly ill-equipped to cope with containers.

It has no gantry cranes, and since no inland customs depots yet exist, containers have to be packed on the docks. Experts claim container ports need between 25 and 30 acres along the dockside for stacking, but Bombay has just a quarter of this area. Even port trust officials admit that container loading can be chaotic.

The general level of mechanisation in the port is very low. It employs about 60,000 dockworkers, and unions have doggedly resisted technologies which displace workers. For this reason, a fertiliser dock with four high-capacity 13 tonne cranes worth a total of Rs 11m have been lying idle for three years.

If mechanical loading methods were used, the port could shift in an hour what currently takes gangs five days to move. Fork-lift trucks are scarce, and most mobile cranes date back to the early 1960s.

Dr. Subrata Ray concedes that most of the warehouses are in such urgent need of demolition that they will soon collapse of their own accord. Yet he claims that the port is working so hard that work of this kind is impossible.

Calcutta port has problems of a different kind. As a riverine port, it is separated from the Bay of Bengal by more than 50 miles of "bars, bores and bends" along the Hooghly River. Like Bombay, it suffers

from the problems of obsolescence.

Unlike Bombay, which is an intermediate port, Calcutta was a terminal for the heavy trade in tea and jute. It is still a major terminal port, though its leading exports are now coal and general cargo, and its main imports are oil and fertiliser.

At one time, Calcutta handled 55 per cent of India's trade. With traffic now averaging 8m tonnes a year, it now carries barely more than 10 per cent. The port is plagued by sitting and many modern ships are too large to weave up the Hooghly River. Its productivity is appalling and, as a declining port, more than 3,000 of its 70,000 employees are now superfluous.

This is no doubt one reason for the port's appalling labour record. In the year to November 1979, strikes halted work at the port for no fewer than 150 days. More than 100,000 man-days were lost, and more than 4,000 ship-days were lost as ships waited for berths. By comparison, Bombay lost only 23,000 man-days, though severe congestion meant 4,500 ship-days were lost.

Union rivalry

One of the main reasons for this discrepancy is the difference in trade union structures at the two ports. In Bombay, there are only three unions, and of these the Hind Mazdoor Sabha is by far the most dominant. By contrast, Calcutta's unions are much more numerous, and none is permanently dominant. Inter-union rivalry, rather than conflict between management and workers, is often the root cause of strikes, go-slows and other disputes.

Mr. R. H. MacDonald d'Silva, deputy chairman of the Calcutta Port Trust, complained: "Because of the politicisation of the unions, whether you like it or not you end up playing one group off against another."

Power

CONTINUED FROM PREVIOUS PAGE

West Bengal state electricity board recently imported five 20 MW gas turbine sets from John Brown of England. The sets were installed within seven months of contracts being signed, and have provided some short-term relief. But with the rising price of diesel, these sets may prove an expensive way of adding to the state's power-generating capacity. Private companies acknowledge that their hastily-installed diesel generators provide very expensive power, but one executive noted ruefully: "Expensive power is not so expensive as no power."

The main reason for the power shortage is low capacity utilisation from the thermal power plants, which supply 55 per cent of the country's power. Output from them has never bettered 55 per cent of capacity (Britain's power stations average 75 per cent, while the private Indian power plant run by Tata has consistently produced 85 per cent of its capacity). At present, India's power plants average 48 per cent capacity utilisation.

But output varies widely. West Bengal's Santaldih plant, which The Times of India recently described as a byword for inefficiency and mismanagement, has averaged about 30 per cent. The Damodar Valley Corporation (DVC) in Bihar, which supplies West Bengal and large parts of the coal fields, has an installed capacity of 1,450 MW, but in the past year has never produced more than 500 MW.

The coalfields, which are supposed to receive 250 MW a day, get an average of 140 MW.

After a degree of government paralysis during 1979, Mrs. Gandhi's emphatically elected Congress government has wasted

no time in attempting to remedy what problems it can. New power plants have been commissioned, most conspicuously the four "super thermal" stations at Singrauli in Uttar Pradesh, Ramagundam in Andhra Pradesh and Farakka in West Bengal.

Between them, these plants should provide extra capacity of 7,200 MW, but none will come on line before 1982. Funds worth \$500m from the World Bank and \$418m from the OPEC special fund have been provided for these plants.

The Government announced just a week ago that it is prepared to invite private companies to build and operate power stations in future, selling their power to the state electricity boards for distribution. It is hoped that a dose of private enterprise will perk up efficiency as well as total output.

It is also likely that foreign companies will contribute to improving power production. The visit of a West German team, briefed to analyse the country's output problems, has attracted public attention.

The Government is also likely to boost hydro-electric power—there is thought to be potential for about 66,000 MW in India. Only about 10,000 MW is currently produced by hydro-electric stations, but a further 10,000 MW has been commissioned.

Total installed capacity at present is about 30,000 MW, and another 15,500 MW should be in operation by 1983. Of this additional capacity, 3,000 MW will be ready by the end of the current financial year, with 2,000 MW planned for 1980-81.

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All unions are associated with one of the major political parties and, depending on which is in the ascendant at a particular time, certain unions can always expect backing from State or Federal Government. Madras port suffers from inter-union rivalries of a kind similar to Calcutta.

Because of these numerous problems, shippers have recently imposed penal congestion surcharges on Indian ports. After rising briefly to 50 per cent in the middle of last year, the surcharge at Bombay is still 25 per cent. In Calcutta and Madras it is 30 per cent. An improvement in labour relations and productivity since Mrs. Gandhi's general election victory has led India's shipping bosses to press the foreign conferences to trim surcharges back to 10 per cent, but no answer has yet been received.

Calcutta's new port at Haldia has been operating since 1977, with a modern container terminal and an oil jetty. But it has never worked at a fraction of its capacity, mainly because the infrastructure of railways and roads linking it to Calcutta and its hinterland has still to be developed. The railways are planning to start building container wagons, while three inland container depots are to be built. All of this will help to boost India's rudimentary container handling capacity.

India's other main ports suffer from similar infrastructural limitations, which means they have never been able to cope with traffic spilling over from Bombay and Calcutta.

While Madras port has now been given the go-ahead for a container port—India's third—it is still mainly equipped for the export of iron ore. Both Madras and Visakhapatnam (often called Vizag) have equipment to handle 6,000 tonnes of ore an hour. Ports in Goa and at Paradip between the coast and 20m tonnes of ore a year, most of it going to Japan, but there are still severe limitations on their ability to handle other cargoes.

In view of these limitations, Mrs. Gandhi's new Congress Government seems to have given the green light to plans for a new port at Bombay. Plans for this port, at Nhava Sheva have existed since 1965. The new port would handle containers, bulk cargo, and modern vessels with a draught too deep for Bombay, releasing the main port for general cargo. When the plan was first mooted, the port would have cost Rs 400m, while the estimated cost now exceeds Rs 1.8bn.

The central government has also doubled its budget for capital spending in the ports to Rs 80bn, with the lion's share going to Bombay. This will allow the introduction of modern machinery, provided trade unions do not dig in their heels.

With the caveat that labour relations are still a long way from improving, independent experts believe India's port congestion problems can be solved quite quickly. One official said: "The port's problems are such that a simple dose of heavy investment and improved management methods will solve most of them."

Whether the new government manages to dispense either of these "simple doses" has yet to be seen.

David Dodwell

and 2,300 MW for 1981-82. Nuclear power generation in India is tiny at the moment, accounting for just 2 per cent of total output. There are no detailed plans for boosting nuclear capacity in the near future, partly for political reasons of political sensitivity. But there are indigenous supplies of uranium—an estimated 20,000 tonnes of yellow cake fuel. India also has the world's largest supplies of thorium, another nuclear fuel (an estimated 450,000 tonnes).

Another means of boosting power output is to reduce transmission and distribution losses, which are currently estimated at an alarming 20 per cent. India has in the past concentrated its resources on increasing power capacity, at the expense of improving distribution. This imbalance will have to be corrected before further areas of the country are provided with electricity (just 40 per cent of India's villages are supplied with electricity).

India's electricity grid is also still rudimentary, and there is no real hope of improving the grid system in the near future. The grid network is expected to grow slowly, probably only when states have a basic surplus of supply.

Since most of these Government plans to ease the power shortage are likely to take two years or more to bring relief, it seems the best thing India can do is pray for rain. If the monsoon is good, then the pressure will be eased. If it is not, then belts will have to be tightened still further, no matter what the cost to the economy.

David Dodwell

Shipping emerges from cash-flow problems

THE WORLD crisis in shipping over the past five or six years has hit India as hard as any country. With falling freight rates and rising costs, especially in wages and dockside facilities, there have been inevitable cash-flow problems. But the signs are that the industry is now emerging from this trauma, and in a reasonably healthy position.

It would appear that income from shipping is now rising and a 28 per cent rise in rates on one important conference, that covering the UK and continental Europe, should do a lot to help sorely-pressed balances back into the black.

In addition, a much-needed management restructuring of the State-owned Shipping Corporation of India, which accounts for just over 51 per cent of the country's fleet, is

having beneficial effects. It begins to look as though the corporation, after increasing losses in the past two years, may get back into profit in the financial year ending on March 31.

The industry's problem, in both the private and public sectors, is to win sufficient freight to remain profitable. In a world where ships increasingly are being laid up this is not easy. India has not had to lay ships up as other countries have — the State corporation has not laid-up a vessel for over five years — but then its fleet is much smaller and confined to the sort of vessels which have been able to weather the economic problems rather more successfully.

It has only two Very Large Crude Carriers and their operation has been commercially

disastrous. When the vessels were ordered there was no port in the country that could accommodate them. They were put out on charter at a time when rates had dropped alarmingly and the result was that the two lost \$8.5m in 1978-79. To make matters worse, the refineries they were intended to serve were not ready anyway by the time the vessels had been delivered.

Too little spent

India also has two large oil/bulk/ore carriers but there are no ports which can really handle these either.

Port problems are one of the factors which militate against the development of a modern fleet. Too little has been spent on port infrastructure in recent years, so that turn-round time is slow, adding to port charges.

There are ships flying the Indian flag that can handle 1,500 tons a shift. But there is no handling equivalent at any Indian port which can move goods at this landed rate. Such a slowing in unloading is another factor pushing up costs.

There are signs that the Government recognises this problem. It has just decided to spend at least \$5m on developing ports, twice the present year's allocation.

The Government has almost certainly been influenced in its decision by the knowledge that six out of the country's 10 major ports are working beyond capacity, which has limited the amount of goods that can be handled.

The problem the Government has to overcome was described by Mr. V. D. Chowgule, chairman of the All India Shippers' Council, last autumn when he

told the annual meeting that the ports were saddled with problems such as congestion, antiquated cargo handling machinery, low productivity, high occupancy berth rate and delays in turnaround.

If the capital spending will help overcome the dockside problems investment in new vessels will go some way to producing a more modern fleet. India's fleet is not noticeably up to date: of 19 bulk carriers, 10 were built before 1970; of 73 cargo liners 43 were built before that year. Only the combination carriers are modern, nine out of 12 having been built in the last decade.

The nationalised corporation is doing something about this via a big order programme. It has 21 vessels of 380,000 dwt under construction in world yards. Six have been placed in Britain, at Sunderland Shipbuilders. Six more are in Poland, four in Yugoslavia, three in East Germany and three at home in India.

All the foreign-placed orders are for cargo liners but the Indian ones are for a bulk carrier from the Cochin yard, a 76,600 dwt ship, a small 4,489-ton passenger-cargo from the Mazgaon dock in Bombay, and three cargo vessels from the Hindustan Shipyard, totalling 50,100 dwt, at Visakhapatnam.

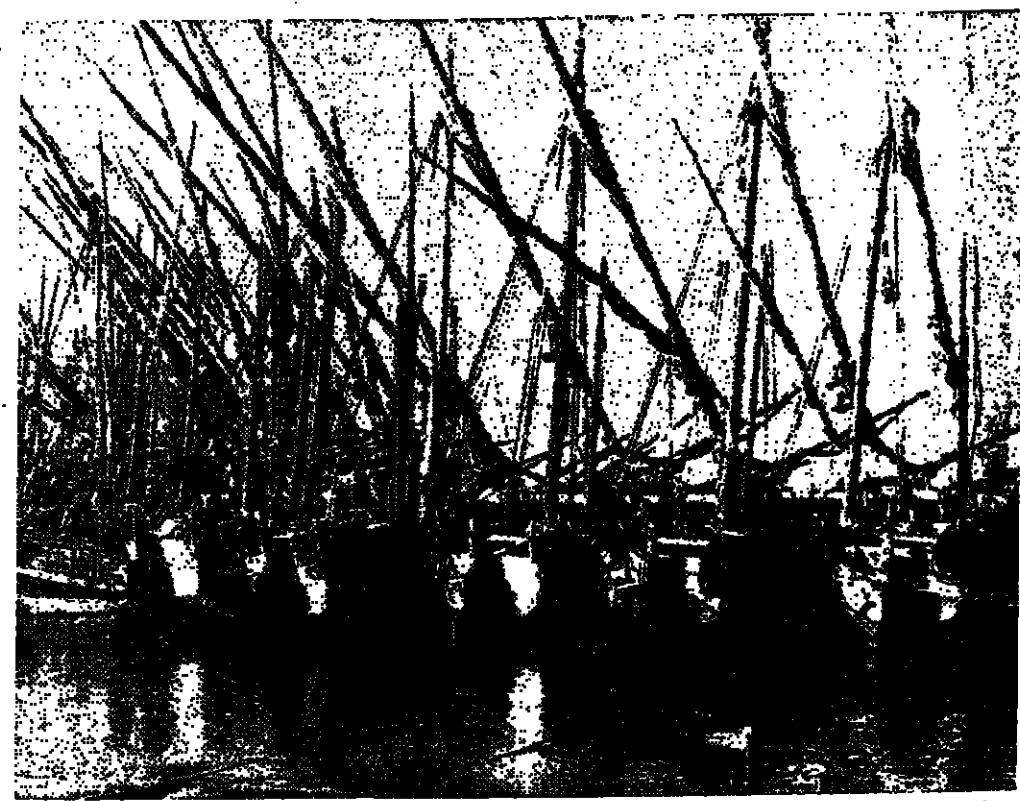
The shipping industry took a significant step to update its facilities in September, 1978, with the introduction of the first container service. That it should have taken so long after their inauguration in the rest of the world is a commentary on India's development of modern commercial practices.

The first service was a monthly one between the country's west coast and Australia. Since then destinations in Europe, the Soviet Union and Japan have been added. Future plans envisage an extension to the U.S. north Atlantic coast and the Great Lakes via the St. Lawrence Seaway.

As the new container vessels come into service India will then phase out many of its older cargo ships.

What India would also like to do is to bring its manpower requirements into line with those introduced elsewhere. India is profligate in the use of manpower on board, not unexpectedly, of course, in a country with such a vast population and such enormous employment problems.

India casts envious eyes at Japan where a law has recently



India's other shipping fleet: dhows tied up in Bombay harbour

been passed which cuts off aid to companies which employ more than 22 crew in certain types of vessel. Indian ships carry a crew of between 60 and 70 where other countries manage with about 25.

However, the shipowner does have the very real advantage that he can get cheap credit from the Shipping Development Fund to build his vessels. Both in the private and public sectors money is available at 4 per cent over 20 years, a considerable advantage over commercial rates charged almost everywhere else outside the Communist bloc countries.

One thing that all the interested parties would like is a stricter enforcement of the guideline laid down by the United Nations Committee on Trade and Development that freight should be carried on a 40:60 basis—that is, 40 per cent carried in vessels of the country selling the goods, 40 per cent in vessels of the country buying them and the rest in third-country ships. Several representations have been made to the Government but little has happened.

The Government is not

unaware of all these problems and is thought to be not unsympathetic towards them. Last April the previous Janata administration set up a committee under Dr. R. M. Honavar, chief economic adviser to the Government, to look into the whole field of shipping.

Careful scrutiny

An interim report, published in September, suggested that careful scrutiny should be made of all applications for loans from the Shipping Development Fund, that there should be curbs on the dividends paid by shipping companies, that a dividend ratio should be introduced and that there should be a special fund for depreciation to free companies from having to make provision out of revenue.

The dividend limitation suggestion has naturally aroused considerable controversy. Dr. Honavar claimed that companies had not followed a rational dividend distribution policy because they had paid what it described as exorbitant dividends when profits were high and had made few pro-

visions against depressed market conditions.

The second part of the Honavar report should be published before long. India's Congress Party administration now has the matter to deal with because the Janata Government took no action on the initial findings. It may be several months before the industry gets any guidance from the Government about whether it accepts, and intends to implement, any of the findings.

For a country which is small in shipping terms—India accounted for just 1.42 per cent of world tonnage last July—great advances have been made. The fleet has grown in every year since Independence, and a great review of requirements is going on within the various companies.

India is asking itself what its future requirements will be, how they can be met and what ships will be needed to meet these requirements. There is likely to be an increasing move towards container traffic, and more product carriers. For a small shipping nation this is a healthy approach to a difficult problem.

Anthony Moreton

PROFILE: REAR ADMIRAL KRISHNAN DEV

Putting the State in profit

FROM HIS office on the 16th floor of the headquarters of the Shipping Corporation of India, Rear Admiral Krishnan Dev has a commanding view of the Malabar Hill across Bombay's Back Bay. It is a view he will not have for much longer. He is 60 at the end of the year and then he will retire as vice-chairman and managing director of the corporation.

What will he do? "I don't know. After the steel industry this is the largest investment in the country. So there is nothing bigger to entice me."

"Anyway, I work ten hours a day and I really have no ambition. When I came here, the corporation was losing money and I will leave it a profitable concern. The same thing happened in my last job when I was chairman and managing director of the state shipyard at Garden Reach, outside Calcutta. I turned it round to profitability in two years."

"So there is nothing in business to attract me. Perhaps I will do something completely different — run a little primary

school. Who knows?"

Admiral Dev has been with the shipping corporation for nearly three years. It has been a difficult period. The State-owned corporation owns 52 per cent of India's shipping and he arrived in the wake of the collapse of world shipping after the 1974 oil crisis.

"They have been very difficult years for shipping but I am contented because the Indian shipping industry is looking up. We suffer from over-manning. I admit. In spite of this, wages in the industry are as good as any in the country."

Hard sell

If he has any regrets it is that Britain is contributing too little to the growth of the Indian economy.

"Do you know, Britain is the only country not to have a chamber of commerce here in Bombay? There is an Indo-French chamber, an Indo-German one and a lot of others, but no British—you leave it all to agents. But this is a very hard, competitive world. You

need to come out here and push and sell aggressively."

"When President Giscard was in Delhi for the Republic Day celebrations in January, he flew down to Bombay specially to attend a dinner for 500 businessmen. He was very impressive. He made an excellent speech in English, spelling out what France could do for India. It makes me sad to think how little Britain does. I have six ships on order in British yards and when I visited them they were most helpful. But there were no follow-up visits out here."

Admiral Dev is convinced Britain is looking too much towards Europe when she should be paying more attention to a market in which she has all the natural advantages—history, language, connections. There is more news about Britain here in the papers than about any other country overseas.

"I always go to Britain first. Britain is where I feel most at home. It is so for most Indians."

Admiral Dev first came to Bombay in the early 1930s as a boy of 13. He was born and

brought up in Lahore, in what is now Pakistan, and spent nearly all his adult years in the Indian Navy. He joined in December 1941, four days after the Japanese bombed Pearl Harbour, and specialised in logistics during his service career.

Part of his service was spent in London as deputy naval adviser at the High Commission and during 1956-59 he attended the National Defence College at Latham, Bucks. He recollects with relish the Westbury Hotel in London's Mayfair ("so convenient") and a speech by Mr. Denis Healey, then Opposition spokesman on Defence, when he was at Latham ("such a good politician").

At the lights come on in the tower blocks on Malabar Hill and dusk falls on Bombay, Admiral Dev turns back to his desk. But not for long. Next year his time will be his own. His philosophy though is a simple one. "I have enough to live on. When I've had my two meals a day, what more could I want?"

Anthony Moreton

By the river Bhadra India's largest paper manufacturing plant gets ready to go on stream

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brate process. MPM has developed systems engineering capabilities that have enabled it to bring together and harmonise the equipment and skills of India's growing industrial infrastructure with the best technology available in the world to conceive, develop and establish India's largest paper manufacturing unit in any single location.

MPM is poised to deploy this experience and expertise in other locations and, in particular, in partnership with other countries of the developing world.

The splendid forests of the Malnad region of India's State of Karnataka need wait only a little longer. The sounds of this industrial plant will awaken them. By mid-1980, MPM's mammoth expansion will go on stream.

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RAW MATERIALS/AGRICULTURE

Coal reserves are vital

THE Black Diamond Express, which leaves Calcutta's teeming Howrah Station daily at dawn, is full of earnest and intense businessmen sitting in spartan and grimy first-class carriages. Most are headed for Dhanbad at the heart of India's richest coal fields—and at the heart of the country's economic problems.

Since the oil price rises of 1974, India's businessmen have had no doubt that the only sure route to steady economic growth lies with rapid exploitation of the country's huge coal reserves. The latest round of oil price increases, which has hoisted the estimated oil bill for 1979-80 to Rs50bn (£2.7bn), simply adds urgently to the need.

Demand for coal from India's thermal power stations, which provide more than half the country's power, has grown steadily at a rate of 12 per cent a year. But coal output has stagnated at around 100m tonnes for the past five years, transforming India from a net exporter to a net importer of coal.

In 1979 alone, coal supplies to steel plants fell by 6 per cent, to cement plants by 8.5 per cent, to the textile industry by 8 per cent, to heavy engineering companies by 14 per cent, and to brick kilns by 55 per cent. Many fertiliser factories have closed for want of coal.

Steel plants have reached such a desperate position, with coal stocks down to between three and four days' needs, that 1.5m tonnes of coking coal is being imported from Australia and Canada.

Defending its failures, the coal industry blames acute power shortages, failure by the railways to supply wagons for coal distribution, an unpredictable labour force, and an antiquated industry inherited from the private mining companies when it was nationalised in the early 1970s. There is some truth in their claims, but the causes for failure go much deeper.

India has proven coal reserves of more than 85bn tonnes, of which about a quarter is of coking quality. The first recorded working began 200 years ago in the Raniganj coalfield in West Bengal, but production rose to only 280,000 tonnes in the following 100 years.

By 1910, production had risen to 12m tonnes a year, with all of the coal being used for steam raising on the railways and in industry.

In 1911 coking coal was diverted for steelmaking—by Tata Iron and Steel Company (TISCO). Production was still stuck at 21m tonnes at partition in 1947, but then rose steadily to about 75m tonnes during the period of nationalisation between 1971 and 1974.

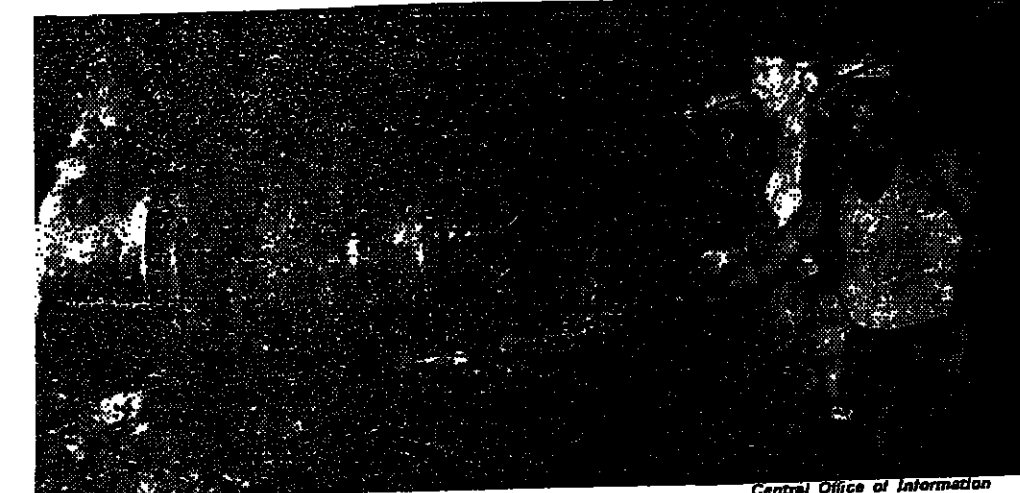
Telling arguments

On nationalisation, one British mining expert wrote: "Quite apart from the moral issues of ownership and management of a country's natural resources, the most telling arguments in favour of nationalisation were the need for vast investment in the mines, in the reconstruction of older mines and for the purchase of new equipment. The need for rational exploitation of reserves and their conservation and the concentration of management skills."

Coal India was created to look over four major mining groups accounting for about 80 per cent of the country's output, Eastern Coalfields and Bharat Coking Coal covering most of Bengal and Bihar, the Central Coalfields and Western Coalfields covering Madhya Pradesh, Maharashtra and Orissa. A remaining nationalised company, Singareni Collieries Company, operates independently of Coal India, in Andhra Pradesh.

Just two small mines were left in private hands: the coking coal mines in Bihar of Tata Iron and Steel Company (TISCO) and the Indian Iron and Steel Company (IISCO).

In the first flush after



A British mining engineer shows an Indian miner how to operate the circular shearer which cuts away the coal at India's first mechanised longwall face, at the Moonidih Mine, near Dhanbad

nationalisation, with Rs 2bn of investment, output spurted to above 100m tonnes. But there it stuck for the past five years. Production in 1979-80 is expected to be close to 100m tonnes.

This stagnation can in part be blamed on a Government decision in 1976 to halt expansion in view of what was then thought to be a coal glut. Independent experts retrospectively feel this attempt to "fine tune" output to match demand was a crucial error. However, many of the problems that now dog the industry would probably have emerged anyway.

Primitive

Many of the mines nationalised in the early 1970s were quite primitive. Coal extraction was still a pick and shovel process in mines that had seen no investment since they were cut a century ago. Even now, such mines account for more than 80 per cent of coal output.

The tiny Pootkee Mine near Dhanbad is typical. About 1,500 miners work manually at coal faces first opened up 100 years ago, producing about 700 tonnes a day. Water streams through the mine and, with power cuts averaging five hours a day, flooding is a constant threat.

Above ground, women load railway wagons using wicker baskets carried on their heads. The mine has a mechanised front loader, which could fill wagons in one tenth the time, but it is used to a fraction of its capacity because to end manual loading would result in heavy unemployment.

The Jharia coalfield, on which the Pootkee Mine is situated, provides a large part of India's high-grade coking coal. But after a century of private working it is honeycombed with shafts that have extracted only 1bn tonnes of coal is trapped in pillars left in the old mines and there is no cheap way to recover it. More than 100 underground fires consume about 8m tonnes of coal every year, and immobilise about 350m tonnes in seams around them.

More than 400 coking coal mines in private use have been rationalised to just 85 since nationalisation. Central railway loading has reduced loading points from 200 to 80.

A master plan exists to clear the Jharia field of a century of chaotic growth—a web of railway lines and roads—and to shift rivers and townships which have grown up over the coal. It will free large areas for open-cast exploitation—and extraction methods which will allow the miners to effectively deal with many of the underground fires.

Inevitably the plan is very expensive and will cause considerable dislocation for the communities living on the field. No date has been set for either initiating or finishing the plan, but until it is, huge quantities of precious coking coal will remain trapped underground.

The nationalised coal industry has also inherited terrible labour problems. Gangsterism

and Mafia-style operations are commonplace—an inheritance from pre-nationalisation days when mine bosses used hoodlums to terrorise recalcitrant workers.

Absenteeism is chronic. Coal India estimates that between April last year and January, 5m tonnes of coal output was lost through absenteeism. One foreign expert on India's infrastructural problems explained that in Bihar, where the problem is most acute, "you just don't have an industrial labour force in the sense we are used to in the West. Many don't yet seem reconciled to such basic work habits as turning up on time. During the harvesting season, many miners simply disappear for weeks."

Strike losses have dwindled since January when Mrs. Gandhi won power, and by late February output had risen by 25 per cent to 380,000 tonnes a day. But no one is sure that there is a casual connection, or whether industrial peace will last. Most feel that labour troubles are far from over, if only because the industry is overmanned to the extent of at least 50,000 workers.

Power shortages have created severe problems for the industry. The Damodar Valley Corporation, which supplies power to the Bihar and West Bengal coalfields, has been running at less than 40 per cent of capacity for the past six months, with the result that the coalfields, which need 250 MW a day, have never got more than 210 MW, and on average get 140 MW.

Flooding risk

Power cuts of about six hours a day have become normal, which has resulted not only in a loss of 6m tonnes output in the nine months to January, but has greatly increased the risk of flooding. During last year's monsoons one sixth of the mines were closed because they were flooded.

Shortages of railway wagons meant that pit head stocks rose to a peak of 14m tonnes last year. With the railway system still over-stretched, distribution is still poor.

This problem would be eased if coal was washed before loading. Coal users complain that up to 25 per cent of the coal they receive is in fact ash, stones and other extraneous material.

As the railways have failed,

so more and more coal is being distributed by road, about 25 per cent of all coal is currently being delivered by truck, at incalculable extra cost to consumers. Coal India has started a programme of mechanisation which could help to improve output. At Moonidih Mine, near Dhanbad, the first mechanised longwall face will soon be in operation, using equipment made by the Dowty group of Britain. Three other longwall faces are being worked by conventional methods, and are to be mechanised during the coming decade. The Moonidih Mine currently produces 1,500 tonnes of coal a day, but once the mechanised face is in full operation output should rise to 7,000 tonnes a day.

Open-cast mining currently accounts for 23 per cent of total output, but this will rise to 45 per cent by 1985, with total production projected at 90m tonnes. Within a depth of 250 feet, Coal India has discovered seams averaging 20 metres thick. One deeper seam is 140 metres thick. Efficiency can also be improved by moving heavy coal-using industry closer to the pitheads, and by heavy investment in washing plant.

Executives at Coal India predict that demand for coal could rise from the current 120m tonnes to reach 200m tonnes by 1985. Starting with a production target of 113m tonnes in 1979-80—a target missed by about 13m tonnes—they still aim for 134m tonnes in 1980-81 and 143m tonnes in 1982-83.

These targets are considered highly optimistic, even though experts believe that current capacity should enable annual production to reach 120m tonnes a year. Coal India's commercial director admits that in other countries this might be true, but that Coal India has learned it must always preface projections with the caveat "in Indian circumstances..."

David Dodwell

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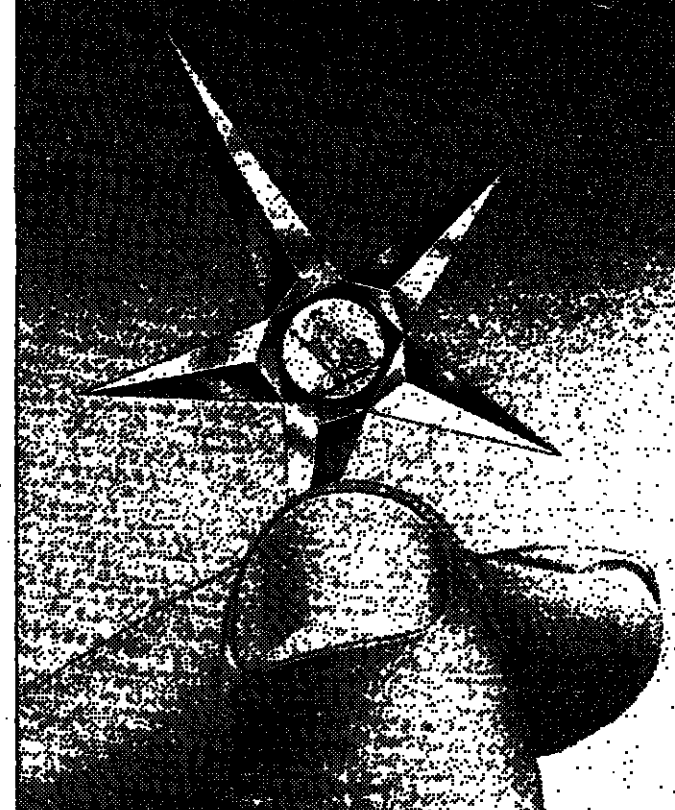
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Tea industry plans to raise output

THANKS TO a steady and substantial rise in domestic consumption the challenge before the Indian tea industry in the 1980s is to raise output in step with demand, especially internal demand.

In fact, the challenge in the 1980s will be very much the same and for precisely the same reason. Both the Government and the industry are agreed on the quantitative targets to be achieved by the end of the current decade as well as by the year 2000, but they differ on approaches to the goal.

According to the latest projection by the industry as well as some official agencies, India needs to produce 1,400m kilograms of tea by 2000 to meet the growing internal demand in full and at the same time satisfy a higher export requirement. The domestic consumption of tea has been rising at a steady rate of 5 to 6 per cent per year compounded with the result that the figure which stood at only 200m kilograms at the beginning of the last decade is likely to touch the 370m kilogram mark during the current year.

Feasible target

It is encouraging that both the industry and the Government believe that 1,400m kilograms by the year 2000 is a feasible target, but as already mentioned each has its own approach to the challenge. In the industry's view raising tea production by more than 24 times over the present level of 57m kilograms (1979 production) would involve at least 250,000 hectares of additional land for new planting, some Rs 1.5bn to Rs 1.6bn of finance plus adequate fiscal incentives for the industry to generate more internal resources to be ploughed back for development. These are broad ideas. To work out detailed projections of consumption, production and export trends of tea up to the turn of the century as well as financial and physical targets that will have to be set, Mr. C. S. Samuel, chairman of the Indian Tea Association, in his capacity as chairman of the consultative committee of plantation associations, has set up a working group of the industry—which shows that the industry has begun to take the challenge seriously.

However, judging from the views of Mr. P. K. Goswami, chairman of the Tea Board, the Government does not think that so much additional land (roughly 75 per cent of the existing area under tea) or finance on so big a scale as Rs 1.5 to 1.6bn will be needed to achieve a production target of 1,400m kilograms by 2000. Mr. Goswami believes that tea productivity can be doubled to an average of 3,000 kilograms per hectare in two decades by better organisation and management of resources and by greater use of technology.

He knows of tea gardens which have a yield of 4,000 kilograms per hectare and they are by no means exceptional cases. Some new land would need to be brought under tea plantation, but not 250,000 hectares, he says.

The industry does not believe that it will be possible to double productivity per hectare in 20 years. The present level of 1,500 kilograms per hectare on average, is the highest in the world and this represents only a 50 per cent increase over a 20-year period during which an intensive effort was made to obtain higher yields. In any case, tea production is an agricultural operation and the crop is always at the mercy of the elements irrespective of the technology employed. For example, the crop in 1979 slipped back to 54m kilograms from 57m in 1978 and 57m the year before, because of a prolonged drought that affected north India's tea gardens. No management, however capable or resourceful, could do anything about it.

This dialogue between the Government and the industry is certainly adding to the anxieties of overseas buyers who fear that India may attach less and less importance to exports because of the vast and growing domestic market. An official committee on tea marketing, in the course of its visit to Europe last year, found considerable anxiety among buyers about India's future policy and intentions concerning tea exports.

The committee reported: "While India was eager in the past to develop its tea exports, it is now wondered abroad how far it will be able to resist the growing pull of its home demand, helped by the attempts to keep down tea prices at home and insulated from the prices abroad."

The committee was appointed

by the Janata government whose restrictive policy towards tea exports leading to quotas and an export duty had caused such fears to arise in the minds of overseas buyers long accustomed to see India not only as the largest source of tea supply to the world market but also a very dependable source.

However, before its fall that government itself had withdrawn all restrictions on tea exports and was even anxious to push up exports during 1979-1980 to at least a level of 220m kilograms. Disruptions to operations at Calcutta port and frequent strikes by tea warehouse workers have got in the way, and no more than 200m kilograms are likely to be exported during the current financial year.

The present government of

Mrs. Indira Gandhi has already declared itself in favour of maximum tea exports — as it wants to maximise exports in general. No other policy would make sense in the current context of higher world oil prices.

Moreover, it would not be in the interests of the tea industry or the country if exports were cut or were reduced drastically under competition from home consumption. Tea exports are a major source of India's foreign exchange income, and they provide nearly 50 per cent of the tea industry's revenue.

In good years such as 1977-78, exports comprised 65 per cent of the industry's total income in that year. No sensible government can ignore these realities. If the industry were to stop exports or cut them drastically,

tea prices in the country would be very much depressed as export prices by and large guide the prices at home, and that would certainly affect the industry's financial health.

Influential people, not only in the industry but outside, would like the country to go all out to capture as big a share of the world tea market as it can. The world market is growing, which is evident from the fact that while India has been exporting 200m kg annually on average for many years, her share in the world tea exports has progressively declined. With 200m kg in 1979-80, the share is just 28.1 per cent, but by 1985 when India, according to an official projection, may be exporting about 260m kg, the share would drop to 26.7 per cent.

However, India is trying to make up on the value-added side of tea exports. As a matter of deliberate policy, the Government has been giving liberal cash aid to those who export tea in bags, packets or in instant beverage form. The trade too has been responding well and value-added tea exports in 1979-80 though only 10 per cent in terms of quantity may fetch more than 20 per cent of the total export income from tea.

North Africa and Western Asia have been the best markets from this type of export but India has been gaining footholds in east and western Europe, Australia and, of course, the United States, which is a particularly promising market for instant tea.

P. C. Mahanti



Threshing jute in Bangalore

Jute production may need to increase

THE INDIAN jute industry is no longer enjoying the super boom that it did during the second half of 1979. It also feels shaken by the levy of a stiff export duty on hessian, one of its lucrative items, yet the outlook remains basically healthy.

There are two reasons for this optimism, both of which are of fundamental importance to the future of this crisis-prone industry. The first, of course, is the recently hefty increases in OPEC oil prices. These have made petroleum-based synthetics totally uncompetitive with jute, especially in Japan and Western Europe. In the United States also, synthetics manufacturers have come under severe cost pressures, and their prices generally are now less competitive with jute than was the case only a year ago.

In the circumstances, the Indian jute industry should have little to fear from synthetics on straightforward commercial terms unless its own prices rise abnormally high.

The second reason for the cheerful outlook is an encouraging expansion over the years of the internal consumption of jute goods. The domestic market now absorbs as much as 60 to 65 per cent of the total output.

With the projected develop-

ment of cement and fertiliser industries and agricultural production promising to remain at a high level the domestic market for jute goods is certain to expand further. It may then become necessary to increase the jute industry's capacity to produce more to meet both the internal and export demand fully.

Jute goods production has averaged about 1m tonnes in recent years. Unless extra demands from domestic buyers are met from new production, this would necessarily cut into the exportable surplus. However, some new mills are coming up outside West Bengal, in Orissa and Andhra Pradesh, which will be commissioned in the near future. It is likely, therefore, that 35 to 40 per cent of the output will continue to be available for export.

Foreign market

At one stage, India exported 85 to 90 per cent of its jute goods production, but has come down to 35 to 40 per cent now. It has all but lost the foreign market for sacking which accounts for more than 50 per cent of the total output.

Had the domestic market not been absorbing practically the whole of this sacking production, the jute industry would have been in a state of

perpetual disequilibrium. Yet exports are vital for the industry's financial health and in fact for its very viability. Goods such as carpet backing and hessian that are exported are high-value products for which also there is no domestic outlet yet.

With export prospects now brighter than ever before, the industry is showing a measure of self-confidence. Mr. Lalit G. Toolsidas, chairman of the Calcutta Jute Fabrics Shippers Association, says that there is an impressive demand for jute manufacturers in overseas markets. Another leading jute manufacturer, Mr. P. K. Kanoria, feels that "there is ground for guarded optimism about market conditions over the short term."

The demand has been increasing from all foreign sources, but significantly, Australian wool interests, the Japanese motor car manufacturers and even the primary carpetbacking market in the U.S.—a market Indian jute goods have long lost to synthetics—are now showing a keen interest in Indian gunnies again. In Mr. Toolsidas's estimate, Indian jute goods exports during 1979-80 may reach the relatively high figure of 500,000 tonnes, as against

only 250,000 tonnes during 1978-79.

However, the imposition of a stiff export duty of Rs 1,000 (nearly \$55) a tonne of hessian may scare away foreign buyers from a product which has been in exceptionally good demand this year. The importers may now turn to Bangladesh which is aggressively competing with India. Worse still, such buyers as have booked their requirements forward well before the levy may now back out because of the obligation to pay a heavy amount of duty they have not counted on.

Whatever may be the Government's justification for imposing a levy on exports to mop up excess profits or any other—export duties have always acted as a deterrent or brake on export promotion, especially for a commodity which has to sell in a highly competitive market such as jute.

In 1970, jute goods exports slumped when export duties were levied on all principal items. It remains to be seen whether history will repeat itself in the case of hessian now. There is a dearth of suitable machinery at home and unusually long delivery periods for the machinery available. Only the Government can help the industry out of such difficulties.

At least the industry is currently free from its raw material worries which are usually there in times of prosperity. The crop this year is much better than expected, following a bumper one in the previous year, so there is plenty to go round and indeed there will be a substantial carryover for the next season.

Consequently, the usual seasonal increases in raw jute prices which take place between March and April are not there. On the other hand, the raw jute price in the Calcutta market has been ruling at a fairly low level throughout the season.

Serious difficulties

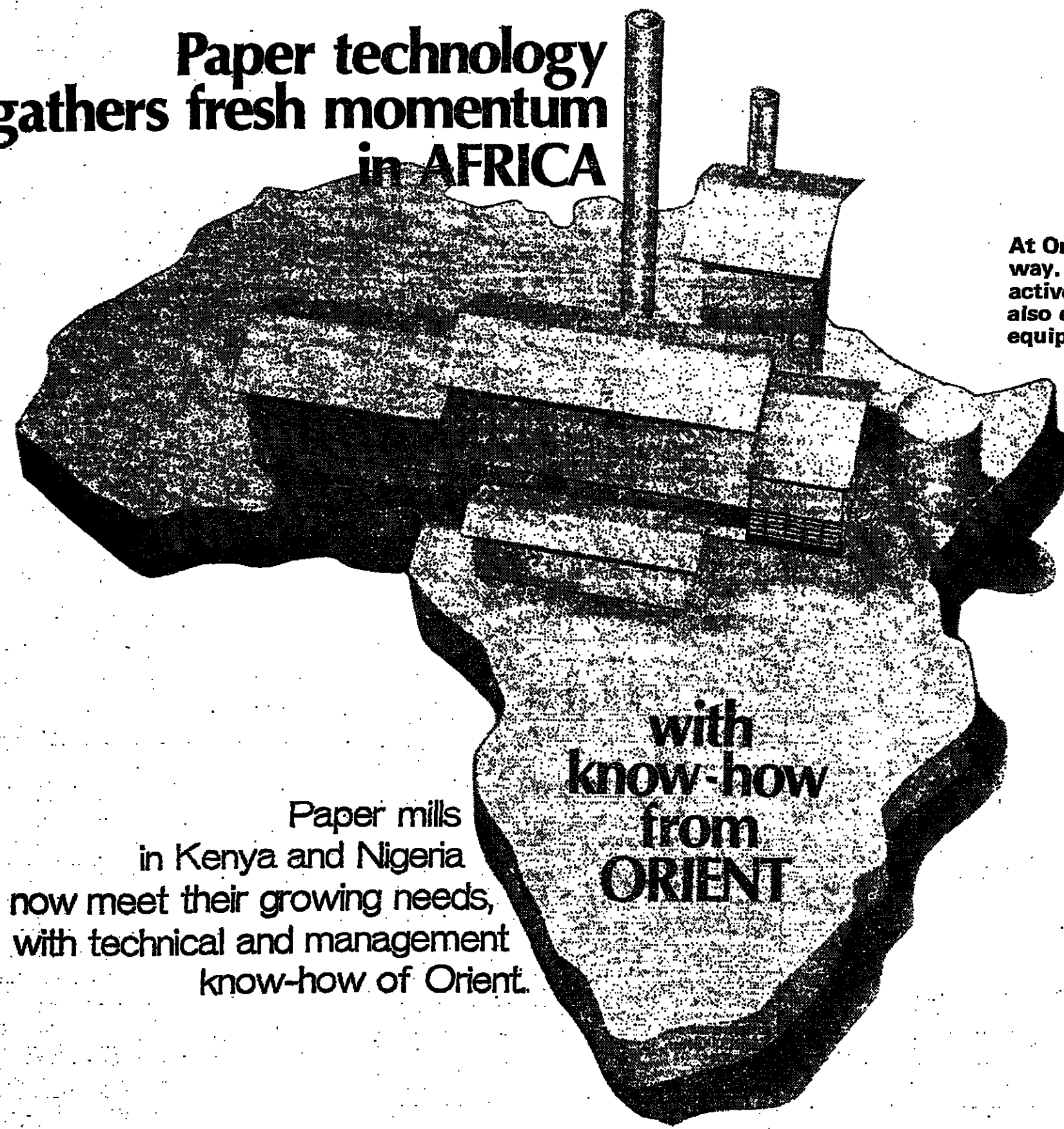
However, the industry sees two serious difficulties in the way. First, there is organised, or even militant, opposition by labour (with full backing from the Marxist Government in West Bengal) to any move for rationalisation of the workforce that modernisation will most certainly involve. Secondly, there is a dearth of suitable machinery at home and unusually long delivery periods for the machinery available. Only the Government can help the industry out of such difficulties.

It needs to be noted, however, that while the prices of jute goods have moved very high—they are still high despite the falls which have taken place since the beginning of this year. Raw jute prices have been stagnating in Calcutta, and are very erratic at production centres.

So this has not been a good year for the growers. They should not feel penalised for producing an above-average or bumper crop and there is now pressure on New Delhi from many quarters, including influential political ones, to take quick and effective measures to ensure that the growers—numbering about 3m, all in eastern India—get a good price.

P. C. Mahanti

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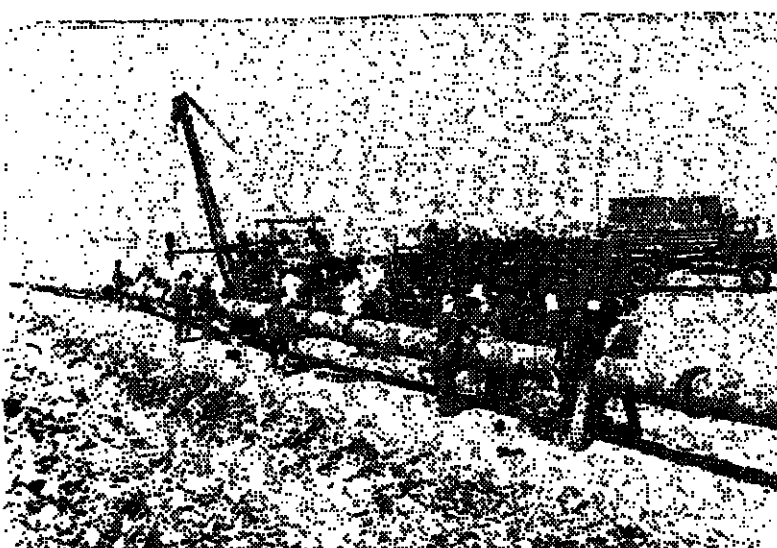
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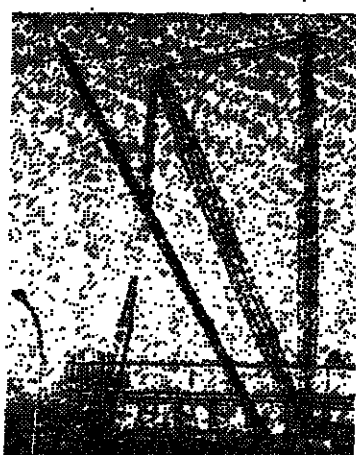


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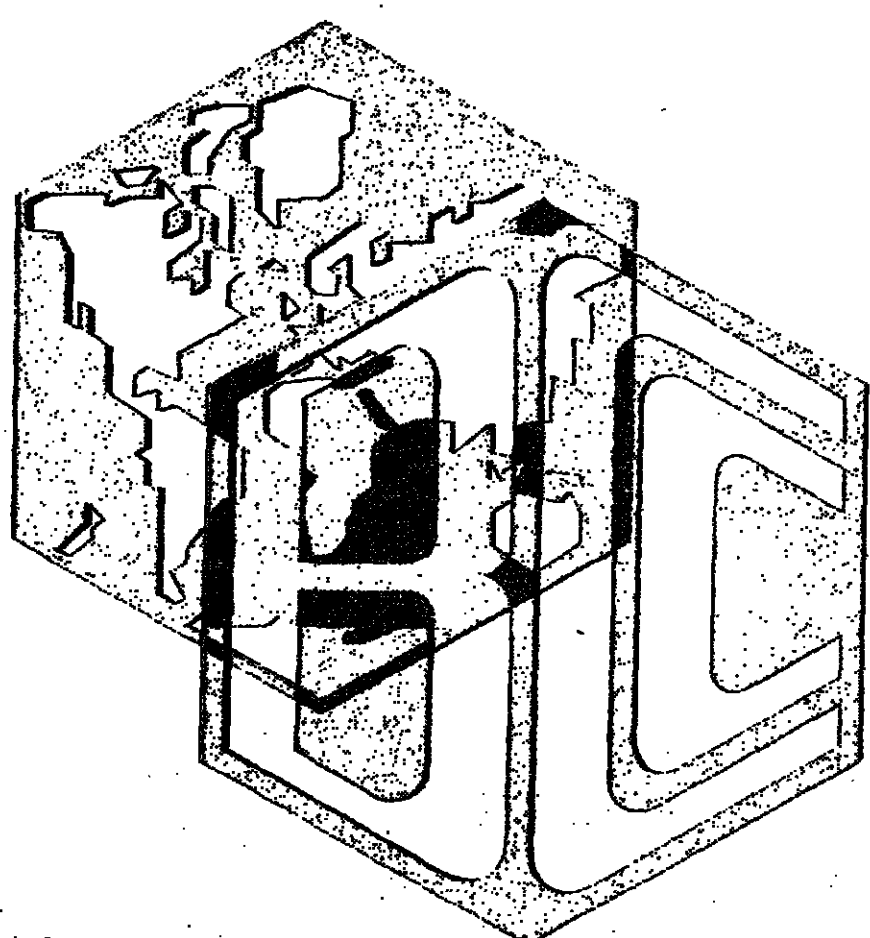
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RAW MATERIALS/AGRICULTURE

Japanese contract keeps iron ore exports buoyant

SMALL BARGES, their decks almost level with the water, sail slowly down the Mandovi river in Goa carrying high-grade iron ore to bulk carriers waiting in the harbour.

But at Vishakapatnam, the main port of the southern State of Andhra, the outer harbour has been enlarged to enable the carriers to come closer and be loaded by new modern mechanical conveyor systems.

These are just two examples of the manner in which nearly 22m tonnes of iron ore, mined in nearly 390 places in India, is exported annually through 10 ports.

India is now the fifth-largest exporter of iron ore in the world and recently won a 19.4 per cent mark up from Japan in price. This is important, since despite the slowdown in world economic activity and the steel industry, Japan has still found it necessary to revise its long-term agreement with the public sector Minerals and Metals Trading Corporation (MMTC) which exports nearly 60 per cent of the total from India.

Last month the Japanese agreed to pay a higher price from the Belladilla mines for ore that is of a similar grade exported by Australia, even though India's efforts to set up an iron-ore exporting countries association on the model of OPEC has not succeeded.

This will help considerably the National Mineral Development Corporation, the public sector company that is developing the Belladilla mine in Madhya Pradesh. The new long-term contract with Japan envisages the export of 7.8m tonnes annually, including 1m tonnes of fines for the first time.

It has also been possible to tie up arrangements for iron ore exports from the Dondmalai mine in Mysore, Karnataka State in the south. MMTC would be in a position to increase the exports considerably if the facilities at the ports were better, especially in the Vishakapatnam outer harbour which caters exclusively to Japan's needs. It is hoped that after an investment of Rs 80m (\$4.4m) in the new three years, the port will increase its capacity and exports to Japan will rise.

There is a perennial argument in India about the desirability of exporting iron ore as

against value-added items such as pig iron and steel. Indeed, the recent projects for shore-based steel plants were evolved on the basis of this thinking and exports of finished products from these will go to Russia and France. But setting up sufficient capacity for steel building requires more funds and time to make use of the estimated reserves of around 15bn tonnes that India has and so the argument has really settled itself.

The reserves are ample and India badly needs the foreign exchange that exports of iron ore fetch. Although customers abroad for Indian steel are still to be sought, provided they fund the establishment of the plants to make it, iron ore exports will continue in as much volume as India's limited port capacity allows.

Celebrated pillar

Iron ore was mined in India well before the Christian era and has been mentioned in the Vedic scriptures. The most celebrated mass of Indian iron, as MMTC proudly points out, is the pillar that still stands unrusted after centuries at the Quth Minar in Delhi. This has an iron content of 99.72 per cent, a quality that is better than anything that the world has been able to produce.

The 15bn tonnes of reserves are located in the States of Bihar, Orissa, Karnataka, Madhya Pradesh and Goa and proving operations are far from complete. The lump hematite iron ore is hard, compact but easily reducible. The calibrated-

sized ore is platy, spongy but hard and most sought after by direct-reduction plants. India's fines ore of medium grade is an ideal sinter feed whereas high-grade fines ore is the best natural pellet feed.

The oxide pellets are highly acclaimed by steel plants in Japan—which took 15.245m tonnes in 1979. East Europe (which will include Russia from this year) (4.2m tonnes), West Europe including Holland, Italy, West Germany and Belgium (collectively 169,000 tonnes) and others (totaling 1.74m tonnes). This netted a total of Rs 2,48bn for India last year.

MMTC, which exports all iron ore except that from the Goa mines, says that in extraction metallurgy, Indian ores—whether lumps or sinter from fines, and pellets from pellets—proved to be easily reducible and least decrepitative. The grades exported have a wide range—from 35 per cent iron to close to the theoretical maximum (70 per cent in the case of hematite). India exports all four types of ore-lumps, closely calibrated-sized ores, fines and pellets, although the principal variety is hematite.

Iron-ore goes out to the world through 10 ports along the eastern and western coasts; increasingly they are being equipped with highly mechanised facilities and are capable of handling large-sized bulk carriers. But it is acknowledged that the facilities are not being improved fast enough for India's ambitious plans to export 30m tonnes by the mid-1980s, although deep-draft ports capable of accommodating up

to 100,000 dwt vessels with loading facilities up to 8,000 tonnes an hour are being constructed.

Huge mechanised mines are in operation at Belladilla, Redi, Goa and Daitari. More are coming up at Belladilla, Dondmalai and Kudremukh. Mines in Barajamade and Bellary-Hospet sectors are mostly still semi-mechanised while studies are in the advanced stages to work the deposits at Malangtoli, Bababundani and Meghahatburu. Plans for setting up pelletisation facilities are being drawn up for Goa, Bellary-Hospet, Belladilla and Barajamade sectors to satisfy those who want value-added items to be made.

Steel plants

This might have to be done at Mangalore also. That is the port through which the iron-ore slurry from Kudremukh is to go to Iran. Kudremukh has agreed to supply 150m tonnes of iron ore concentrates over a 21-year period beginning this year. Iran agreed to accept 3m tonnes in the first year, 5m tonnes in the second year, and then 7.5m tonnes annually.

The massive project is almost ready to start shipments in August this year, as provided for in the agreement. But the turmoil in Iran has meant that the steel industry there has not developed as planned and the contracted quantity of iron-ore concentrates are not needed. Hence, the agreement is to be renegotiated to accommodate the Iranians and the surplus ore will probably be used at a pelletisation plant to be set up at Mangalore with eventual customers elsewhere in the Middle East.

Nevertheless, Iran has at least decided to go ahead with the \$630m project even though it is \$240m in arrears (payments were to be made in instalments as the project progressed). Under the original agreement, Iran was to begin receiving first shipments of iron ore concentrates from Kudremukh from next August.

The Kudremukh Iron Ore Company, especially set up for the project, is ahead of schedule and, in fact, has asked Iran for the proposed rates of shipments by this unique operation, which involves reducing iron ore to slurry before it goes down a gigantic pipeline to Mangalore port.

Work has been maintained in accordance with the original schedule because the Indian Government continued to provide funds despite the uncertainty created by Iran's default. Kudremukh has agreed to supply 150m tonnes of iron ore concentrates over a 21-year period beginning this year. Iran agreed to accept 3m tonnes in the first year, 5m tonnes in the second year, and then 7.5m tonnes annually.

K. K. Sharma

Priority for textile industry

TEXTILE PRODUCTION AND EXPORTS

Year	Production* (in metres)	Exports† (Rs m)
1970	8,931	1,301.8
1971	8,577	1,263.4
1972	9,140	1,736.7
1973	8,908	2,653.3
1974	9,344	3,725.2
1975	9,247	3,095.8
1976	9,551	5,968.0
1977	9,568	6,060.0
1978	10,522	5,616.7

* Of all textiles, both cotton and blended
† Of cotton textiles only

THE TEXTILE industry was assigned priority in the sixth five-year development plan and although the programme is under review by the new Government, the targets for textiles output are unlikely to be changed.

In the five years ended 1983-1984 production of textiles is scheduled to rise by slightly more than 3 per cent per annum on average. An official working group, whose report formed the basis for fixing Sixth Plan targets, has projected total cloth production at 12.2bn metres in 1983-84 against 10.52bn metres in 1978. The 3 per cent growth is expected to yield a considerable export surplus—in contrast to past years, when the increase in production was a marginal 1 per cent a year.

Besides the handloom sector (one of the three main components of the textiles industry), which is to get official support to raise production to 3.7bn metres in 1983-84, the organised textile mill sector is to produce 4.8bn metres of cloth of all varieties, cotton as well as blended, five years hence. The third semi-mechanised sector, known as powerlooms, is to produce 3.7bn metres of cloth. For the handlooms, the 1983-84 target amounts to a 50 per cent increase over the 1978 level.

The policy of the Janata Government, in whose regime the targets were set, had laid emphasis on producing as much as possible by cottage and village industries as a means of maximising employment, especially in rural areas. But the average annual growth of around 3 per cent set for the organised textile mill sector is considered significant. Over the past four years the annual growth of output was less than 1 per cent for textile mills, which have been clamouring for a bigger share in the textiles

production. The weaving capacity of mills has been frozen for several years as part of the 1971-72 freeze. The freeze has to some extent blunted the edge of competition in the international market. Difficulties in raising the weaving capacity have reduced the capacity of the textile mills to meet the changing needs of overseas customers. For instance, India does not have modern machinery to produce quality denims, leaving the field to Hong Kong.

Fierce competition in the international market, despite import quotas by developed countries, has made Indian textiles less competitive. Added to this is the limited modernisation of the ageing plant permitted by the Government, which is apprehensive about the adverse impact of large-scale textile mill industry modernisation on the handloom sector. Only 21 per cent of the total 207,000 looms are automatic. As a result, cloth produced is inferior and the cost of production is high.

The Government wants the handlooms sector to grow at a rapid pace for two reasons. First, it provides larger employment opportunities, especially in villages. Secondly, such a strategy helps exports since developed countries are more sympathetic to larger import quotas for handloom fabrics.

Despite the quota system, the EEC and the U.S. have emerged as two of the three main markets for Indian textiles. The third is the East European bloc, especially the Soviet Union, which places bulk orders. But Indian exporters are apprehensive of the Russian market because political ties between the two countries govern trade relations as well.

Indian exporters have been exploring new markets, because over the past 15 years there has been a directional change in India's textile trade. Africa and certain South-east Asian countries have set up their own textile industries. The loss of these markets has been made good by larger exports to the U.S. and the EEC. The future

strategy is to export more to the developed countries and explore the oil-rich Middle East countries.

A recent survey reveals that there is immense opportunities for export of grey fabrics to West Europe provided India supplies wide-width fabrics with longer piece lengths. The scope for export of more finished fabrics and made-ups is also good provided quality is up to international standards. There is still substantial unfulfilled quotas of EEC (20 per cent) and the U.S. (75 per cent).

The success on the export front depends on the pace of modernisation. Nearly one-third of the textile mill industry is in the public sector, which took over closed textile mills as part of the Government's unemployment relief operations.

The Government instituted a scheme for selective modernisation of textile mills with loans from financial institutions at a concessional rate of interest of 7 to 9 per cent against the normal lending rate of 11 per cent. Since June 1979 146 mills have secured loans of about Rs 1.81bn under the soft loan scheme and 187 applications for Rs 3.81bn are being processed. Private textile mills are lobbying the Government for permission to import wide-width looms.

Sterling is the intervention currency for all external transactions of the Indian rupee. The recovery of proceeds against textile exports is governed by the pound-dollar rate on the London money market. Over the past few months the pound has been strengthening, making the Indian textile exporters worse off. Exporters want pegging of the dollar-rupee parity at a certain level to protect their export income.

R. C. Murthy

China threatens EEC market

INDIA IS bracing itself to meet the emerging Chinese threat to its textiles market in the European Economic Community (EEC) and the prepare the ground for a larger share when negotiations start in 1980 for fresh EEC quotas.

Exports of Chinese textile fabrics and their products to the Community are to double to 40,000 tons this year from 20,000 tons in 1978, according to a recent EEC-China agreement. A higher textile quota for China should not by itself be a threat to India as "cheap" textile imports from all developing countries are regulated. India has an annual 80,000-ton textile quota for fabrics and ready-made garments and this is not fully utilised. Out of the 40,000 tons of textile fabrics (the remaining quota is for garments) India is allowed to export to EEC, shipments of only 22,500 tons (56 per cent of the entitlement) have been made in the first eight months of 1979. The quota is bound to be under-utilised with the pattern of demand for textiles in Europe shifting from cottons to woollens in the winter. On current reckoning, India would be able to fulfil at best 70 per

cent of the EEC quota. In contrast, quota utilisation by China is better than that at India. For instance, China was able to use the 10,816-ton quota for fabrics fully in 1978 and secured a quota for 21,000 tons for 1979.

India's concern over China's activities in the EEC stems from quality and competitiveness. In fabrics, the bulk of both the Chinese and Indian cloth exports to EEC consists of greys. Keen competition is also expected in household linen and cotton terry towelling. China has a well-developed textile industry with 275,000 automatic looms compared with 42,000 in India.

India's share in EEC textile imports has declined from 7 per cent in 1976 to 5 per cent in 1978 although the market as such has expanded. The Mediterranean countries have been the ones to gain. This is part of what an Indian textile exporter calls deliberate EEC policy to achieve a redistribution of "cheap" imports to benefit the newcomers.

At present, India is trying not only to utilise fully the quota but also to retain the EEC market share.

R. C. Murthy



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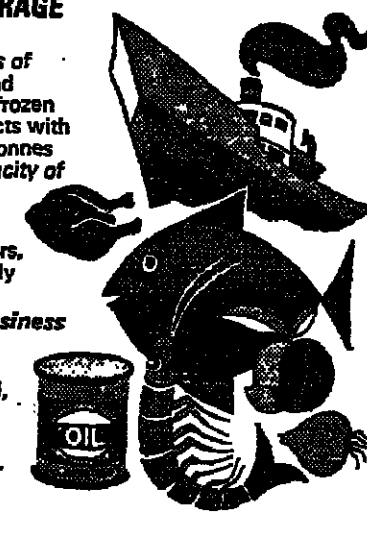
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Dastarum APT-15 C



Indian companies are winning contracts abroad but at home development projects provide more work. Here a canal is being lined as part of a project to reclaim land, grow forests and provide water in Rajasthan. It has been partly funded by the International Development Association.

Foreign success for civil engineering

KAMANI Engineering Corporation of Bombay, leaders in high-tension transmission, says proudly that it has "virtually put a transmission girdle around the world." It says this with some justice since there are now millions of homes, villages, cities and industrial centres in over 18 countries which throb with electricity transmitted through towers and lines installed by Kamani, now the second largest tower manufacturing unit in the world with an average turnover of more than Rs 2bn (£110m).

Kamani is a good example of the remarkable strides made by Indian civil engineering firms in obtaining contracts abroad, often edging out firms from developed countries. In the past year, Kamani has won turnkey assignments in power transmission worth about Rs 1bn. These include a Rs 65m job in Libya followed recently by a Rs 280m contract with the Electricity Corporation in Tripoli which involves laying a 350 km 220 kv double circuit transmission line in Home Misurata area.

Indeed, Libya seems to be Kamani's favourite hunting ground since it is working on a Rs 145m turnkey job in transmission for the Public Electrical Works Company of Tripoli. This involves design, supply, construction and maintenance of 66 kv double-circuit transmission line for a route length of 310 km.

Competence

After Libya, Iran, Here, Kamani bagged the Rs 350m Tabriz-Mazandaran second-line project 230 kv single circuit power transmission turnkey job which it considers prestigious since it is taken as a mark of faith in its competence and economy by the power project authorities. Kamani has executed a 150 km turnkey project of 115 kv d/d transmission line in Thailand. It is also taking part in a number of Indian power projects, including the first 400 kv power system in the country initiated by the Uttar Pradesh State Electricity Board which is 500 kv transmission line towers it has sold to the U.S.

This pride is shared by a number of Indian civil engineering firms, including those in the public sector. Most of these are concentrating on the Middle East. The Projects and Equipment Corporation, a subsidiary of the State Trading Corporation, has also done well in Libya where it recently bagged a

Rs 400m order for construction of schools, education centres and housing projects on a turnkey basis. PEC is concentrating efforts on securing turnkey contracts abroad and is currently negotiating with Iraq, Nepal, Bangladesh and Indonesia, although it is actually falling behind its target.

In the first nine months of 1979-80 (April-December) PEC exports totalled Rs 195m and it hopes to achieve another Rs 100m by March. But the total of around Rs 300m is well below the target of Rs 560m it had set for itself. Infrastructural constraints, which have adversely affected exports of engineering goods from India, are said to be the main reason for the setback suffered by PEC.

In fact, there is a growing realisation that the booming market in the Middle East and other countries should be handled with care so that Indian companies do not tarnish a reputation that they are acquiring. The Ministry of Industry has made a substantial change in its approach to overseas projects by public sector undertakings and has shifted emphasis from acquiring new contracts to completing assignments already in hand.

Many public sector undertakings are way behind in completing contracts. The example of Engineering Projects India (EPI), whose major turnkey construction contract in Kuwait is lagging behind and costing both the company and India heavily in terms of reputation, is one example that the country does not want to repeat. The final phase of the Rs 2.3bn Ardiya project being executed by EPI may be awarded to some other company and this is a major blow since it has not helped India's image. Officials are now on a repair job and hope to make good the lags.

There has been such a tug-of-war for turnkey jobs abroad that many Indian companies have been competing with each other. This undesirable feature is being sought to be rectified by naming "lead" companies for undertaking turnkey projects in the Middle East.

For civil construction projects, countrywise allocations have also been made among public sector companies. For instance, Engineers India Ltd. (EIL) will concentrate on petroleum refineries, petrochemicals, fertilisers, cement and paper. Bharat Heavy Electricals (BHEL) will be responsible for power generation and also be the lead agency

for composite projects for power generation, transmission and distribution in Libya (where Indian firms are involved in a variety of civil engineering projects).

Other "lead" companies include Hindustan Steel Construction, Engineering Projects India, Hindustan Machine Tools, the Projects and Equipment Corporation, the National Building Construction Corporation, the International Airports Authority and the Indian Road Construction Corporation.

That the need for such an approach has arisen indicates the seriousness with which the Government is going about the work of capturing contracts abroad and protecting the reputation of public sector companies. It is also hoped that by adopting the "consortium" approach—by which companies co-operate with each other in making bids—more successes will be achieved.

Supervise

This effort is spurred by the success of Indian consultancy firms now being increasingly used by the Middle East oil-rich countries and companies to supervise the work being done by firms from Western developed nations. Consultancy services fetched Rs 138m for India in 1978-79 compared to Rs 95m the previous year, an impressive 48 per cent rise. The Federation of Indian Export Organisations expects the figure to be higher this year because of the rise in contracts won abroad.

The Federation has been asked by the Government to co-ordinate promotional efforts in this field and it is both inviting delegations from abroad and sending Indian teams overseas to explore further possibilities. It has also constituted a working group to identify sectors where Indian consultancy services could be provided, and to identify and analyse the strategy to be adopted for various projects sponsored and financed by regional and international funding agencies. The group will also study problems faced by consultancy organisations in their export efforts and suggest to the Government the facilities and incentives needed by them.

Consultancy is provided by about 90 public sector companies and another 60 in the private sector. Their operations cover such varied fields as financial management for shipbuilding and repairs, engineering services for fertilisers,

petroleum, power and hotel projects.

Notable among them are Agrima Project Engineering and Consultancy Services, Development Consultants, Engineering India, Howe (India) Pvt. Ltd., M. N. Dastur, Metalurgical and Engineering Consultants (Ranchi), National Industrial Development Corporation, Rail India, Tata Consultancy Services, Tata Consultancy Engineering and Water and Power Development Consultancy.

Today, Indian consultancy organisations cover very nearly the entire spectrum of industrial and infrastructural activity

with nearly 15,000 qualified professionals working in more than 120 organisations.

Indian firms are being helped to make bids abroad by provision of credit for overseas turnkey projects. Commercial banks are now authorised to sanction for small projects as much as Rs 10m at branch level so as to co-ordinate the credit sanctioned by the public financial institutions and export promotional agencies. Even this is considered inadequate, but Government procedures are notoriously slow, even in the export field.

What is causing concern is that, even though the total

value of Indian construction contracts abroad are worth more than Rs 20bn, these are limited mostly to the Middle East and North Africa. It is true that many consultancy contracts and those for turnkey jobs for setting up textile, sugar, cement and power generation have been won. But it is a measure of the potential of the country that it is acknowledged both by the Government and the companies concerned that the achievement of Indian industry, as far as project exports are concerned, is not proportionate to its capacity. In other words, much more can and will be done.

K. K. Sharma

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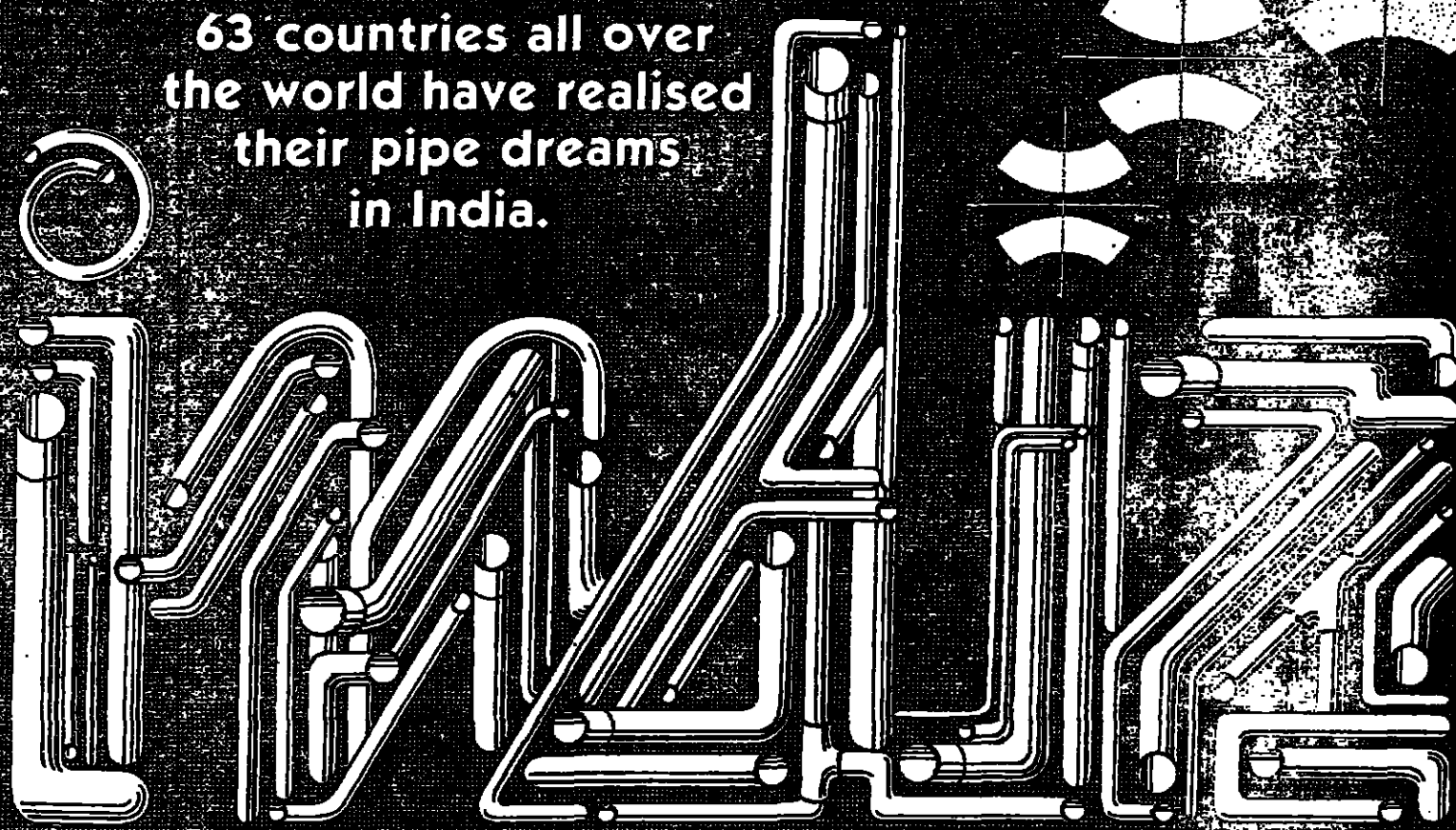
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SOME RECENT

MAJOR CONTRACTS

WON ABROAD

National Building Construction Corporation: civil construction of 1,300 houses in Libya (\$112.50m), National Building Construction Corporation for the Shuait Sewer Works in Iraq (\$5m), Builders International, for construction of wholesale market centre in Qatar (\$9.90m), Continental Construction for construction of dams in Libya (\$90m), Continental Construction for draining and sewerage scheme in Iraq (\$9.38m).

Indian Road Construction for building roads in Libya (\$17.50m), Engineering Projects India, for building a defence camp in Kuwait (\$100m), Engineering Projects India, for construction of a residential complex in Kuwait (\$31.25m), Shah Construction Company for construction of a bridge near Khidir Iraq (\$5.75m).

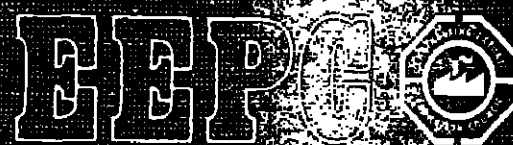
Bridge and Roof Company, for civil work for purification and treatment plant of sewerage project at Najaf and Kerfa in Iraq (\$6.75m), Engineering Construction Corporation, for civil works for terminal building complex of new international airport at Abu Dhabi (\$35m), Engineering Construction Corporation, for consultancy and export of construction material

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ENGINEERING

Outlook for steel uncertain

INDIA'S STEEL industry needs a faster rate of growth in the 1980s than has been possible during the 1970s. If the country is to have an installed capacity of 24m tonnes of crude steel by the end of this decade Mr. Pranab Mukherjee, the new steel Minister, has just said that this is his government's target for 1990, but has not given any clue as to how this target will be achieved.

Present capacity is about 11m ingot tonnes. If the major expansions at Bhilai and Bokaro, taking their capacity to 4m tonnes each, are completed over the next three to four years, then the installed capacity would go up to 15m tonnes by the mid-1980s.

Except for the 3.4m-tonne project at Visakhapatnam which is being set up with Russian help—which, incidentally, would mean that the Russians have helped build up two-thirds of the total steel capacity up to the 1980s—there is no prospect of another greenfield site plant being built in the near future.

During the Janata rule there were reports of the British Steel Corporation, the Davy Ashmore group, and some German, French and Japanese steel companies showing interest in Indian steel projects, but nothing really materialised. The Steel Minister of that government, Mr. Biju Patnaik, often tried to bring in foreign technology and capital for export-oriented coast-based steel projects but his efforts were no more successful than the government or governments to which he belonged.

Timetable
The new Steel Minister has been talking about "self sufficiency" in steel in the 1990s which should imply that one or two more steel plants will be built to take India's capacity to 24m tonnes by 1990. But the point to consider, therefore, is whether the new plants will be built entirely with indigenous technology and equipment.

Of course, India has built a strong technological base, at least as far as the steel industry is concerned, but if the heavy engineering corporation is to be entrusted with the task of making all the equipment for the Visakhapatnam as well as other new plants, a task which most probably will be assigned to it, then the chances of the steel programme following a timetable will become very uncertain indeed. The long delay

Bokaro steel plant is due largely to delayed deliveries of equipment from the heavy engineering corporation.

Thus the long-term outlook for the industry is rather uncertain. All talk of "self-sufficiency" in the 1990s notwithstanding. Even in the short run, the industry has come up against serious problems owing to poor infrastructural planning in the initial phases which have been forcing the industry to keep a substantial part of its capacity idle, thereby aggravating the steel shortage at home.

As one expert has put it: "To begin with, the problem was a dearth of adequately-trained managerial and technical personnel. Now it is the infrastructural insufficiencies which are posing all the challenges."

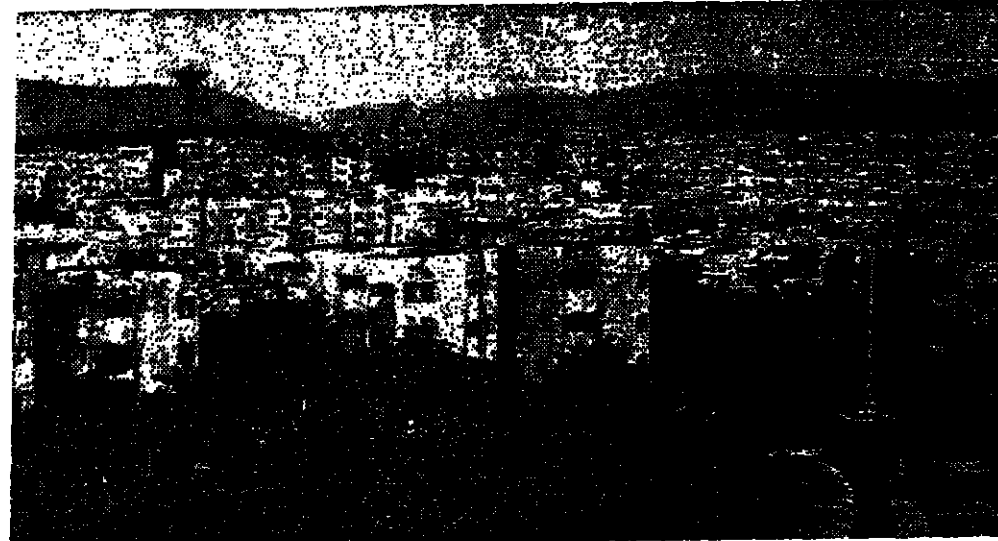
Poor foresight has meant that power planning for the steel plants has been the faultiest of all. The major steel plants at Durgapur, Bokaro and Burnpur (Indian Iron and Steel) depend heavily on a single power generation agency, the Damodar Valley Corporation, which has been performing very poorly in recent months. This has hit these steel plants so hard that, often, rolling mills cannot roll all the ingots produced with the result that the plants are now having to carry disproportionately heavy ingot stocks.

Captive power plants have been sanctioned for Durgapur and Bokaro but these will obviously take time to be built, and they will be built at today's cost which is much more than what it was in 1970 when suggestions to build captive power facilities were made.

The coking coal problem is going to remain with the industry for a long while yet, not only because of the country's limited endowment but because of the inability of the railway system to transport the output from the mines adequately. The problem of more efficient beneficiation methods and finding other solutions to the high ash problem remains, but if the private company Tata Steel is to be set up, it will have to deal with this problem.

The Government's strategy now is to make the coal industry produce more and compel the railways to move coal to the steel plants and power stations on a high-priority basis. The Janata government's policy of importing low ash coal has been abandoned because of the high cost.

How the infrastructural inadequacies are costing the country heavily can be judged from the fact that the average rate of capacity utilisation in 1979-80 may not go higher than 60 per cent. During the past two years it was just a little more and the industry produced only 5.7m tonnes of finished steel in 1978-79. This has created shortages in the domestic steel market



Low-rent housing for workers of the Tata steel company at Jamshedpur, Bihar

necessitating imports on a substantial scale.

For 1978-80 the country has ordered imports totalling 1.9m tonnes and if the production rate does not improve significantly during 1980-81, it is hard to see how further large imports can be avoided.

Steel demand in 1979-80, according to Dr. P. L. Agrawal, chairman of the Steel Authority of India, is higher by 12 to 15 per cent than that of the previous year, and this high rate of demand growth is expected to continue in 1980-81 as well.

In the circumstances, the use of electric-arc furnaces is being encouraged, to partially bridge the supply gap. Together, they have an installed capacity of 3m tonnes, but due to power and melting scrap shortages, are expected to produce only 1.5m tonnes of crude steel in 1979-80, the same quantity as in the previous year.

To get round the melting scrap problem, two sponge iron plants using the domestic iron ore and non-coking coal as solid reductant, are being set up. Negotiations are also going on with Indonesia to set up a joint venture there to produce sponge iron with Indonesia's natural gas and India's good quality iron ore. Part of the output will be brought back to India for use by the steel plants.

Conditions
Some experts feel that technical conditions at the plants may not be as good as the managements claim. The three public sector steel plants—Rourkela, Bhilai and Durgapur were set up nearly 25 years ago. If nothing else, arrears of modernisation in these plants must be considerable now. According to the new Steel Minister, a programme of modernisation has been drawn up for the plants and the proposals are being considered by the authorities.

According to the Steel Authority of India, the country's equivalent of the British Steel Corporation, this modernisation programme is as much slanted towards improving the operational efficiency of the plants as to updating its technology. India's steel technology is a blend of the old and the new and the idea now is to discard as much of the old as possible.

In Bhilai, the first Russian-built steel plant, the modernisation programme includes the introduction of L.D. converters, continuous-casting facilities and a huge plate mill with a 1m tonnes capacity. These are in addition to extensive renovation of all old equipment.

The public sector steel plant at Durgapur has a modernisation programme for which the help of the British Steel Corporation is being accepted. Here the problem is not only of modernising equipment but a change of the product-mix by adding some high-value products so that the plant gets out of the unfair stigma of being a losing concern most of the time. This would involve some expansion side by side with modernisation.

A significant part of the proposed modernisation programme for Durgapur is the installation of a blown oxygen converter along with a continuous casting unit. This, however, is a research and development item which is meant for gaining experience in the latest technology in steel making so that, in due course, the steel industry as a whole benefits from the experiment.

The Indian Iron and Steel Company, which once belonged to the private sector but is now part of the public sector, is being also modernised along with other units but there is less emphasis on revamping the technology than on rebuilding the equipment.

The newest public sector plant at Bokaro naturally has all modern features and its steel melting operations have been computerised. The plant in Bhilai will be computerised soon and the third Russian-aided steel project, at Visakhapatnam, will also have the key operations computerised. Thus some areas of steelmaking in India will be as modern as anywhere in the world.

As for the oldest steel plant in the country, the Tata Iron and Steel Company—which is still called the private sector of the industry as it is managed by Tata though holding only 4 per cent of the capital—it too has a modernisation programme on top of a renewal and replacement of machinery scheme which has been in operation for some time.

Modern features

The main idea behind the modernisation programme is to replace part of the old steel-making capacity by a new 1.1m tonnes oxygen steel-making plant. There are other modern features such as continuous casting, but the centrepiece is the oxygen steel-making plant so that the works can make steel faster and thereby cheaper. To finance the programme—the total cost is estimated at Rs 1,600m (£80,444)—the company proposes to borrow abroad to meet part of the cost.

It is a pity that a highly efficient unit such as Tata Steel is not being encouraged to double its installed capacity—to 4m tonnes—although this is what the company is well equipped to do and has been wanting to do. To put up a brand new plant on a greenfield site would cost many times what it would take Tata to add an extra 2m tonnes to its existing capacity, and in a much shorter time.

P. C. Mahanti

PROFILE: M. H. MODY

Vigilant eye on Tata group

THERE IS a sharp little argument going on in India at the moment over whether colour television should be introduced. The Minister of Information and Broadcasting, Mr. Vasant Sathé, has urged that a start should be made, even if only in one city and on an experimental basis.

His critics retort that such a step would be a pointless waste of resources. They reply that TV is, anyway, largely confined to the urban areas and has become a mere appendage to the Bombay cinema, catering for the lowest common denominator.

The argument is typical of the country's electronic industry. Many within it want to push forward the frontiers of knowledge but know that if they do they will only add to the country's social problems. No one is more aware of this dilemma than Mr. M. H. Mody, Burroughs, and some of the country's leading businessmen.

"This country," he says, "is full of entrepreneurs and if they were only set free they could do wonders for the economy. But bureaucracy sits on them and inhibits them."

"There is a strong demand for computers, for example, but it can take at least 18 months to get an import licence and as long as five years is not unusual. This is bureaucracy gone mad. Many companies which want to put in computers won't even bother to apply, knowing they have to face such delays."

Mr. Mody, an accountant by profession, is aware that in a country like India, the introduction of computers has to be undertaken with great social responsibility.

"When you have so much unemployment, as we do, and when we create work to employ people, you must be very careful about doing anything that leads to unemployment. The social cost of unemployment, after all, falls on the nation."

But there are fields where you absolutely need computers. Later this year millions of enumerators will go out across the country to take the census. If the answers were not pro-

cessed electronically, we should not have the results before the next census in 1990. As it is, we do not even now have all the results of the 1970 census, which has been handled manually.

"More clerical automation is not good for the country. Companies must be allowed to use computers selectively where the job could not otherwise be done."

It is a measure of Tata's confidence in the future of the country's electronics industry that it should have linked with Burroughs two years ago in a 50-50 partnership (unusual enough in a country that likes to keep foreign participation to 40 per cent). It is an even greater measure of its confidence that Tata should have given Mr. Mody the task of running the company.

Distinction
For Mr. Mody is chief executive of Tata Sons, the parent company of the giant Tata group. For half the week he is building Tata-Burroughs, a company with "one general, a lot of very good troops, but too few officers." For the rest of the time, he runs the group from his Bombay office.

Mr. Mody has been with the group for only eight years. But his training as an accountant helps him to keep a vigilant eye on the group's multifarious businesses.

He was trained in both India and London, where, in 1956-57, he was a graduate student of the London School of Economics. And he has one other rare distinction: he is a chartered accountant in both India and Britain.

Later this spring, Mr. Mody certainly will merit the title of India's leading businessman. Then he is to be made president of the Associated Chambers of Commerce and Industry of India, a post roughly equivalent to the presidency of the Confederation of British Industry. This will bring him even more into contact with the Government.

Mr. Mody detects a change for

the better with the return of Mrs. Indira Gandhi's Congress Party to Government. "The Janata Government was very negative about big industry and automation. It was committed to the villages and wanted to encourage small-scale production."

"Silicon chips are now produced in ten of millions. But there is nothing produced in this country which needs 10m chips. Despite this, the Government is setting up capa-

city for integrated circuit minifabricating."

Mr. Mody believes that India, despite its many problems, has a sound industrial infrastructure and the capacity to grow. We are self-sufficient in many areas. We are entrepreneurs. We shall take off—despite the layers of bureaucracy. But don't ask me when that will be. It could be six months or six years."

Anthony Moreton

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Participation in national growth continues with a Rs 880 million investment now underway to expand fertilizer manufacture. On completion of the project in 1981, the output of this plant will help to produce an additional 3 million tonnes of foodgrains every year.



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Vehicle production lags behind

LIKE OTHER key sectors, of Indian industry, commercial vehicles have been badly hit by infrastructural constraints and actual production is way behind installed capacity. Tata Engineering and Locomotive Company (Telco), the largest plant making commercial vehicles—

with an installed capacity of 28,000 trucks and buses at Jamshedpur and Poona—expects to lose production of at least 6,000 vehicles in 1979-80 simply because of a shortage of power and similar difficulties.

This inevitably will hit exports since Telco has sales in more than 40 countries. Demand for its vehicles, initially made in collaboration with Mercedes-Benz but now totally indigenous and independently manufactured under the Tata brand name, is growing both at home and abroad. But its chairman, Mr. S. Moolgaokar, complains bitterly of the considerable under-utilisation of capacity because the "power position is catastrophic."

Manufacture of commercial vehicles has been adversely affected, not only by power shortages but by the chain effect this has on their ancillaries

which are unable to supply components without which the finished product cannot be made roadworthy. Telco's own 300 suppliers of components have suffered. This is apart from the long 88-day strike last year at Mico of Bangalore, the only suppliers of diesel engines and tractor units to the industry.

Mr. Moolgaokar is sharply critical of the Government for its failure to tackle the problem of infrastructural facilities. He points out that half the price of trucks goes to the government in the form of taxes. However, hardly anything has been done to improve the conditions of highways and roads so that truck operators have to function uneconomically.

Energy saving

If even half the tax collections were used for improvement of the industry's infrastructural needs, says Mr. Moolgaokar, not only would production increase but there would also be considerable saving of scarce energy.

Demand for commercial vehicles is growing and the Indian manufacturers are unable

to meet it, both from India and outside. Hence the government's decision to allow expansion of existing units making them, although Mr. Moolgaokar is again sceptical because of bureaucratic hurdles in the way of expansion.

He says that Telco was asked by the government itself to expand its capacity despite the Monopolies and Restrictive Trade Practices Act that bans growth of the established "large industrial houses." But then the Government delayed approval of the expansion it had itself sought and two years elapsed before Telco's present capacity of 28,000 vehicles was established. In the meantime, costs had escalated.

The government has now cleared plans in principle for expansion of Telco's capacity to 46,640 vehicles under the system of automatic growth of installed capacity notwithstanding the Act, which allows 5 per cent expansion annually to manufacturers of commercial vehicles. Telco could thus go up to 56,000 in the next five years at an additional investment of Rs 83m (£32m). The company is expected to issue convertible bonds for financing this, although Mr. Moolgaokar proudly says that Telco has no problem of finding funds.

Additional capacity has been approved for other units also. The Government has just cleared Ashok Leyland's Rs 2.7bn scheme for increasing its production from the present 12,500 vehicles to 40,000 a year. This will involve setting up new manufacturing units at Karnataka, Maharashtra and Rajasthan in addition to Ashok Leyland's only existing plant at Madras. The majority share in Ashok Leyland is held by British Leyland, the parent company.

The Simpson group, which holds a licence for manufacture of commercial vehicles, is also to make Ford trucks which are to be imported initially. The collaboration with Ford has been approved. Manufacturers of lighter trucks like Mahindra and Mahindra, however, are not joining in the expansion programme since they have also considerable idle capacity. Nevertheless, Mahindra and Mahindra is embarking on a modernisation programme.

This involves an agreement with Peugeot of France for

transfer of technology for a plant to manufacture modern diesel engines for their vehicles (which are mainly Jeeps). The new plant will involve an investment of Rs 160m and will manufacture 25,000 diesel engines.

Mahindra's present plant has a licensed capacity to make 25,000 vehicles but it is considerably underutilised since production is now just 13,500 Jeeps and 4,000 light trucks (the company also makes about 12,000 tractors, accounting for about 20 per cent of the Indian market).

The internal demand for commercial vehicles is increasing by 25 per cent annually, despite fears that the withdrawal of the system of national permits to truck operators would lead to a marked fall in sales. One reason is the problems which have slowed down rail transport and this has encouraged increased use of road haulage.

Queues of trucks

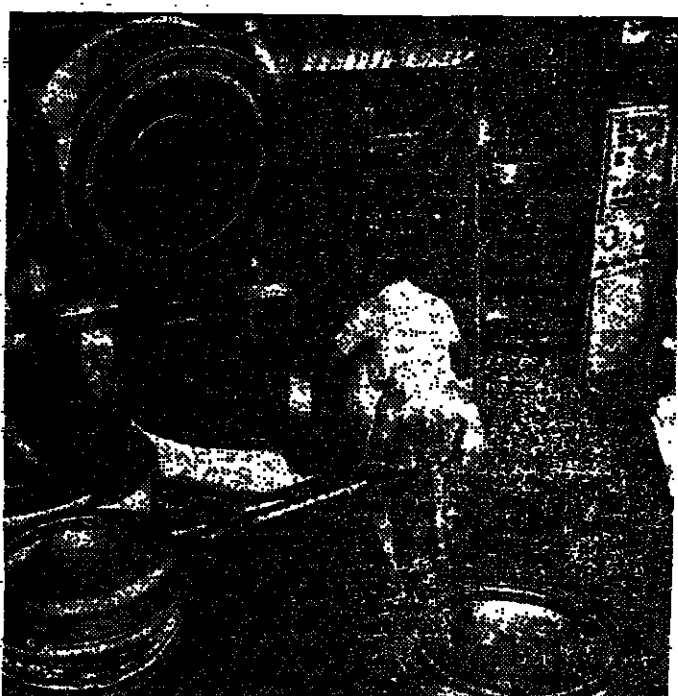
The current diesel fuel shortage has given ample evidence of the popularity of trucks and buses. All along the highways are visible queues of trucks, often more than a mile long, on both sides of diesel pump stations waiting for the supply of their limited ration.

Going by the current level of production, the demand for commercial vehicles will undoubtedly outpace their availability (even after imports are taken into account) but there is no intention yet to curb exports because the Government does not want to lose established markets. Hence the emphasis on increasing capacity and production supplemented by imports.

Because of production constraints, the industry will not be able to achieve the target of 67,000 commercial vehicles set for 1979-80 which represents a 15 per cent growth over the preceding year.

Even during 1978-79 production of commercial vehicles, which attained an impressive 41 per cent growth with an output of 1,58,260 was still lower by 1,740 vehicles compared to the target of 60,000 vehicles set for the year. The total production of commercial vehicles in 1977-1978 stood at 41,250.

K. K. Sharma



Making truck tyres at the Dunlop India factory at Ambattur, near Madras

Breakthrough aids joint ventures

EARLY THIS year, Alusuisse of Switzerland agreed to float a jointly owned company with the Indian public sector consultancy firm, MECON, for the purpose of participating in turnkey contracts in third countries. This target is obviously the Middle East, where Indian firms have reaped an abundant harvest.

But the significance of the tie-up between the Indian and Swiss firm, which will result in a company to be named Indo-Swiss Engineering Company, is that not only does it represent the first link between a major company from a Western-developed country and an Indian firm for joint bids but shows a recognition of Indian industrial capabilities.

So far, for the past several years, there has been much discussion between the developed world and the Indian Government on the desirability of such tie-ups. The argument is that, apart from the obvious advantage that India has in the form of low labour costs, the country has also developed appropriate technology that is suitable for the Third World.

Married to the technology and finance available with the Western world, this could result in mutually advantageous jobs in developing countries. But this has had limited success and, for the most part, industrialised countries have been content to allow a limited number of sub-contracts to Indian companies.

Pacesetter

The Swiss agreement is a breakthrough because, for the first time, the much-talked-about tie-ups between companies of the industrialised countries and India to operate in third countries has actually been translated into action.

The venture could prove to be a pacesetter. The new company will function mainly in the Middle East and MECON hopes to get a considerable amount of design work as a result. For instance, Alusuisse is currently negotiating with Libya for a Rs 80m alumina project and a major chunk of the design work as well as construction and engineering work will probably be done by MECON, which already has an international reputation. It will also result in orders

for Indian companies since the agreement with Alusuisse stipulates that the "maximum possible supplies of equipment" will be sought from India. Alusuisse itself undoubtedly will expect to gain by using the cheaper technical personnel MECON can provide to make competitively low bids for projects.

The breakthrough is important but so far it remains the only one, although similar ventures have been discussed elsewhere. But so far, joint ventures in which Indian companies have been associated are mostly those in which they have invested in other Third World countries.

Maximum use

Not all these ventures have been successful, not even in Malaysia where there is a heavy concentration. An exception is the Indo-Malaysian Engineering Company started by Kirloskar Electric of Bangalore and the reason seems to be the latter's conscious decision to make the maximum use of local capital and manpower.

Indeed, Kirloskar believes that most Indian joint ventures are mainly for the purpose of exporting value-added items without the intention of increasing progressively the local content. This violates the criteria for joint ventures allowed in India itself where the Government insists on Indianisation of both the equity and manpower. Kirloskar is an example to follow since it went to Malaysia with the belief that "business is only for the tough."

Malaysia is a competitive market where the strongest survive and, if many Indian joint ventures there have fallen by the wayside, it is because they are not getting the preferential treatment they are used to. Lacking Government backing, they fall to get off the ground and fall victim to what some consider is a ganging up by others.

Parry's of India, for instance, tried to set up a sweets plant in Malaysia. It failed because local businessmen allowed it no chance; and when it was forced to sell out, the Chinese buyers immediately got it going profitably.

Kirloskar has not had universal success and it speaks particularly harshly of the Philippines where it found it is

impossible to function without backbreaking pay-offs to local officials and businessmen. But it plans to start a trading company in Kenya and another in Malaysia.

In all cases they will follow the dictum: avoid using Indians locally and limit their participation to finance and supply of technology. Indeed, this is following guidelines set by the Government which believes that Indian companies have the appropriate technology for the Third World and encourages them to push ahead.

It has not always worked this way. In fact, one reason why there are so many Indian joint ventures abroad is that there are limitations placed on the expansion of the so-called "monopoly and large industrial houses" inside India and so they have been forced to look outside.

Towards the end of 1979, 53 joint ventures were launched by these large industrial houses. This accounts for about 25 per cent of the total, while in terms of equity participation they accounted for as much as 74 per cent. Birlas tops the list with 14 units in production abroad, with a total equity participation of Rs 135m (£7.4m) and nine units under implementation with an equity participation of Rs 68m.

Tataps follows with six, Tatas with four and J. K. Singhania with three. Like other joint ventures, most of their investment has been in the form of plant and equipment while fees for technical know-how account for 8 per cent of the investment. Although restrictions on financial participation have been eased, they are still sufficient to limit actual cash investment to insignificance.

Joint ventures are mentioned repeatedly as part of Government policy, but by and large Indian companies have been slow to take these up unless they feel they have to in order to expand, or can make gains by exports. The corporate sector in India has had too sheltered a life inside India to really feel the need to look outside, although this is now changing slowly.

On the whole it remains true that the policy approach to joint ventures has been guided by compulsions of export development.

Initial failures of joint ventures, particularly in the early 1970s, have acted as an inhibiting factor (about 20 have actually folded up while, by the end of October, 1979, 141 of the 364 projects that received Government approval have not been implemented so far). Partly this is because of procedural hurdles put by the Government itself and also because of the lack of understanding of conditions in the countries they want to operate in.

One critical study of Indian joint ventures abroad points out that the whole concept was a sequel to the capital goods recession in the country in the late 1960s and the consequent foreign exchange crisis. The main endeavour has been to use joint ventures as convenient outlets for idle capacity in capital goods units and to earn foreign exchange.

Financial ability

This philosophy persists. An official statement says: "Joint ventures are mainly an export promotion measure and to the extent possible, our equity participation should be in the form of supply of machinery and know-how." The efforts of many Indian investors were not always suited to the peculiar market and economic conditions in the investing countries, nor was the competition anticipated by them (as Kirloskar's did).

The result was that the majority of Indian investors who ventured abroad did not have the managerial and financial ability to withstand the initial setbacks. In some cases, even the much-talked-about technical support did not materialise and this has tarnished the image of Indian companies abroad.

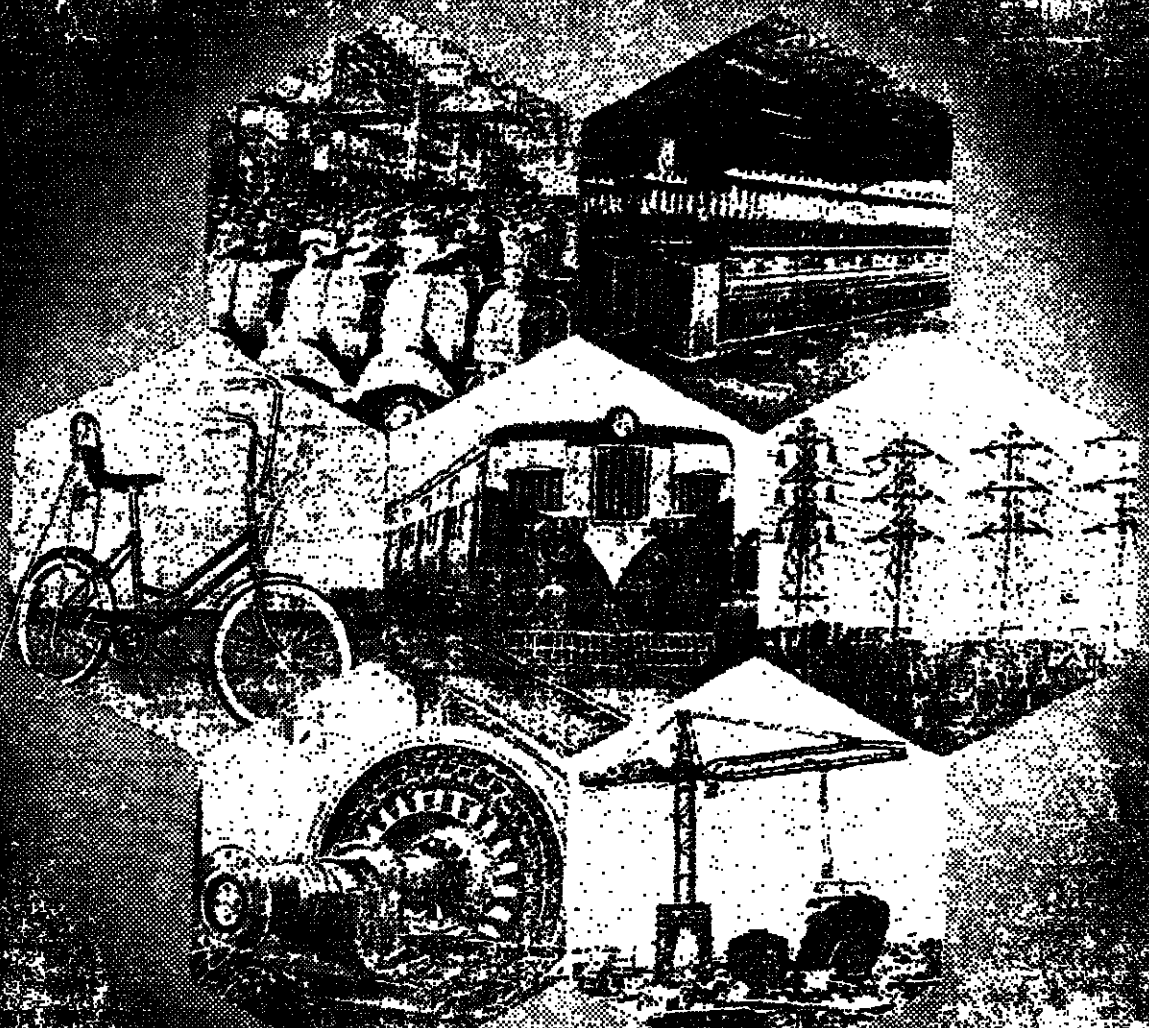
Even so, the overall performance is not quite so bad as the study suggests. The 107 units in operation at the end of December, 1978, accounted for exports of Rs 233m in plant and machinery by way of contribution to equity capital of Rs 277m. They repatriated Rs 21m in dividends and Rs 46m as know-how fees and engineering services. The figures are bound to increase, so at least the official policy of making joint ventures earn foreign exchange is working out slowly.

K. K. Sharma

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ENGINEERING

Machine tools slip in world league

THE MACHINE TOOLS industry amply demonstrates the vast progress and the vast problems of India in the 1980s. Exports of machine tools have grown, but so have imports, to about twice the value of export earnings.

Total production and variety of India's machine tools have improved steadily, but the country has slipped down the international league to 21st position and has dropped below Taiwan and South Korea.

For all this, the Indian industry says there could be extra foreign orders for the taking if only there were more capacity, if the power supplies were regular, if new investment was encouraged, and if only decisions were taken quickly.

A key area such as machine tools tests the appropriateness of government policies. Small may be beautiful, but a machine tool maker cannot build or develop without a good market. Monopoly may be harmful, but an Indian "monopoly" company is tiny on a world scale; yet it is on a world stage that machine tool makers must perform.

Import substitution can bring benefits, but it also brings dangers in a rapidly-developing world of falling behind and continually having to import the latest, most sophisticated, and most expensive machinery. Self-reliance is a good thing, but even if pushed to extremes can cut a country off from new technological developments.

"India's machine-tool production has steadily increased and ultimately we hope that exports will at least match imports," said Mr. S. D. Sulakhe, secretary of the Machine Tool Manufacturers' Association. "But we can't export in a big way because of domestic demand and because of the size of our companies."

"America, for example, would like to offload the simpler un-economic machine tools and import them. This could be an opportunity, but it means producing 200 or 300 or even 400 machines a year, whereas the total production of most Indian companies is 100 machines a year."

Dominant company

Total Indian machine tool production in 1979 is estimated at about Rs 1,210m (\$150m) by the association, though the authoritative journal American Machinist puts India's production slightly lower at \$129m.

The State-run HMT, which used to be known as Hindustan Machine Tools, is the dominant company with annual production valued at more than Rs 400m. HMT changed its name partly because of diversification which has taken it to making tractors and watches as well as machine tools. Goods besides machine tools account for about half of HMT's output. Of the 50 per cent of machine tool production in private

hands, the largest company is Kirloskar with machine tool sales of Rs 150m a year, followed by companies such as Cooper Engineering, Godrej and Alfred Herbert.

India's progress through import substitution has been substantial and today the country is more than 85 per cent self-sufficient. As an example of the success, over the last few years India's import policy has been liberalised, but as far as general purpose and standard machine tools are concerned imports have been few because Indian machines are available at competitive prices.

But now a plateau has been reached and new policies will have to be carefully considered, some of which may be in conflict with the Government's overall ambitions.

One problem is India's lack of economic growth. So far the order book has been good, to some extent because shortages of power, iron, steel and other raw materials have slowed production. But industry sources fear that machine tools are the first to suffer in recession and the last to recover, and predict that with the continuing oil crisis important machine tool users such as motor vehicle industry ancillaries will be badly affected.

In terms of the ambitions of the Indian planners, the machine tool industry seems to be falling behind. The official aim is to see capacity reach Rs 3bn and production Rs 2.5bn by 1983. Exports should reach Rs 750m, at least according to the targets. All of this looks optimistic today.

According to Mr. Sulakhe: "There has been hardly any new investment in the past two years in machine tools." New investment requires licensing and under India's cumbersome procedures that takes months if not years to accomplish. And with any company with assets of Rs 200m falling under monopolies regulations, progress can be even slower and more tangled in red tape.

Moreover, progress means new technology and this will almost certainly mean foreign collaboration or investment, pre-

sending new hurdles of government suspicion and permission and licensing to be overcome.

The Machine Tool Manufacturers' Association grumbled in its last annual report: "The procedure for obtaining manufacturing licences and foreign technical collaboration for new products is cumbersome and time-consuming. In respect of machine tools requiring sophisticated technology and high investment, firms which can undertake such manufacture belong to large MNCs ('Monopoly') houses. Under the existing policies such large houses face a number of difficulties."

In certain cases, the quantities of machines required in the domestic market are so small that it may not merit their economic manufacture. Policies relating to imports, customs duty and foreign collaborations further import substitution."

The Indian industry traditionally has had close ties with British, West German and American machine tool companies. At one time there were more than 125 collaboration agreements with the West. Though the numbers have now been reduced co-operation continues and is responsible for some notable Indian advances. Alfred Herbert, for example, is making De Vlieg jig boring machines at Bangalore, though probably half of the production of about 12 machines a year will be sold in America because of the small Indian market.

Collaboration

The Indian tool makers have recognised the need for foreign collaboration and the big international exhibitions in Milan (in 1979) and in Chicago (in September) are occasions for strong Indian delegations to attend to talk to their counterparts. As a result of discussions in Milan plans were made for a delegation of UK machine tool makers to visit India this year.

However, Government suspicion and tardiness can delay links between India and foreign companies. Whereas previously agreements were made for seven

WORLD PRODUCTION 1979 (\$m)

Country	Production	Exports	Imports
West Germany	4,300	2,400	2,900
U.S.	3,800	600	2,600
USSR	2,800	250	1,000
Brazil	240	32	200
Taiwan	170	120	70
South Korea	150	22	140
India	129	31	50

(Figures rounded; some include USSR estimates.)

Source: American Machinist February, 1980.

to ten years, now three to five years is the official standard. To an extent the Government is justified, because sometimes in the old deals what was important was the initial transfer of technology and little was added subsequently.

What is needed now is sufficient flexibility and fine tuning to allow continuous cooperation and the feeding in of new improvements. Industry sources complain that officials, with their addition to magic guideline figures, cannot always appreciate the need for give and take.

Royalty payments are another contentious issue because, as Mr. Sulakhe says: "What was found attractive about 5 per cent in the early days, when we were making shapers and centre lathes, is no longer so when we are having to import high technology."

India's own research and development effort is about 2.5 per cent over the whole industry and about 5 per cent of HMT's budget. But the setting up of the Central Machine Tool Institute at Bangalore is having an impact on improvements in Indian products. In 1979 the institute produced 25 new or improved machine tools and allied equipments.

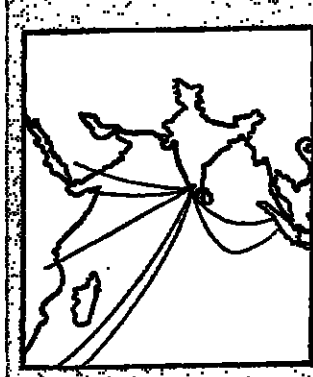
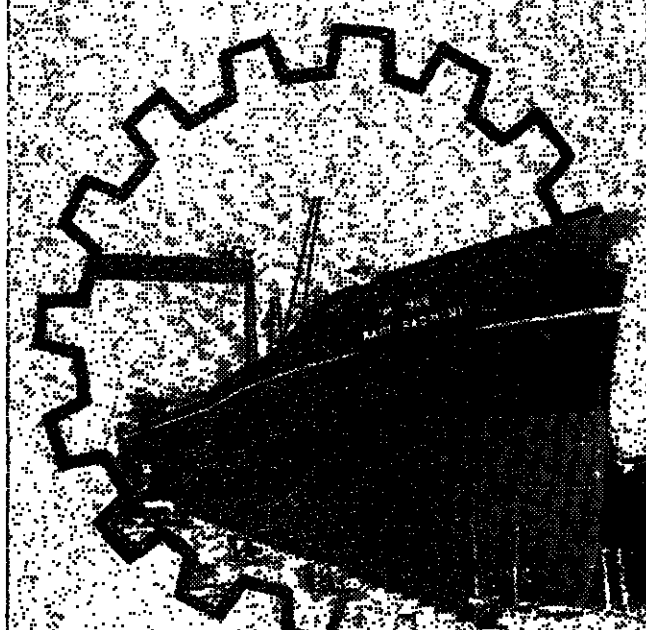
Machine tool exports are dominated by centre lathes which in 1978 were almost a third of total Rs 135m exports. They were followed by general cutting tools, radial type drilling machines and power presses.

Industrialised countries, notably the U.S., West Germany, the UK and Australia, which each bought Indian machine tools worth Rs10m, are the most important, though in the past few years some developing countries have come into the bottom of the export lists. These include Kenya and Iraq. Even so, the sheer volume of the industrialised markets will prevent any radical changes in the pattern of trade.

Within India there is a growing interest in the industry. Mr. Sulakhe said that the 1979 Intex exhibition was visited by 150,000 people, even with a Rs 5 admission cost to discourage casual sightseers. The attendance at the Chicago International Machine Tool Show is about 100,000. But the problem, as in the rest of Indian industry, is to turn the world's second most populous country into a bigger market.

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Capital goods benefit from international competition

THE INDIAN Government's decision three years ago to liberalise imports of capital goods sent shivers down the spines of managers of units making them in the country. Having been sheltered for nearly 30 years, there were fears that the high-cost capital goods industry would crumble in the face of international competition. A recent study shows that the fears were baseless.

Even in the power equipment industry, the main one in which imports were encouraged, it has been found that the bulk of the orders still go to Indian manufacturers with the possible exception of specialised equipment (such as gas turbines) that is not made in the country.

This suggests a strong case for throwing larger areas of the economy open to international competition, since many companies concede that the liberalised policy forced local units to lower their own costs and improve efficiency. That the Indian capital goods industry has reached maturity is conceded by all concerned. It is now in a position to set up complete power projects on a turnkey basis (for example, by Bharat Heavy Electricals), build a wide variety of vessels for defence and commercial needs (Magnum Docks, Garden Reach Workshops and the like) and manufacture complete textile mills and sugar plants (Birkas and host of other companies).

Single-minded

In fact, the capital goods industry, with a current annual output that is estimated at around Rs 20bn and which accounts for more than a third of the country's engineering goods exports, has produced nearly the entire equipment needed for building up infrastructure in the country. This was possible because of the Government's single-minded pursuit of a policy for nearly 30 years of import substitution and self-reliance (mostly because of the shortage of foreign exchange).

If now the major units of the capital goods industry, such as the Heavy Engineering Corporation at Ranchi, are suffering from heavy under-utilisation of capacity, it is partly due to infrastructural constraints but mostly because they were dependent for demand for their products on Government orders for railways, power, construction, ports and ships.

Imports of capital goods in 14 sectors (in which global tenders are now allowed) has not really affected any downstream. They are: fertilisers, newsprint and paper, basic drugs, basic technical materials for pesticides and weedicides, power

generation, transmission and distribution; mineral exploration, mining and beneficiation; petroleum exploration and production; petrochemicals up to the stage of polymers, manufacture of professional electronic components; waste disposal and effluent treatment; materials handling projects; ports, sugar, cement and cement products; and 100 per cent export-oriented industries.

But there have been severe fluctuations in demand from Government agencies whose investments and policies on them have never been consistent and this has adversely affected the growth and prosperity of the capital goods industry. Machinery manufacturers, therefore, are pressing for a steady rise in the allocation of resources for purchase of capital goods since this is basic determinant for the future of the capital goods industry.

This may not be immediately possible since the Government has decided to scrap the Janata's Sixth Five-Year Plan and it will take some time before the draft of the next is ready. Hence, both public and private sector units view with considerable disquiet the possibility of a drop of orders since they are not being given a chance to plan ahead themselves for manufacture of plant and machinery.

Apart from fresh orders, the replacement demand is also low. The machine tools industry, for example, has advance orders for only six months instead of the preferred two years. Apart from the fact that important machine tool users like the tractor and automobile sectors are not doing well, major users are also going slow on replacement of obsolete tools.

A study made recently by the Association of Indian Engineering Industry says that the replacement demand for plant and equipment manufactures should be between 20 to 22 per cent. Instead, it is now estimated to be 7 to 10 per cent.

On the basis that any plant and equipment more than 25 years old should be replaced, a census of existing units would show that a majority needs replacement on an urgent basis. Hence the need to stress modernisation and this, the association feels, would give a shot in the arm to the capital goods industry. The alternative would be rapid deterioration of industries set up in the 1950s and 1960s.

Since the main problem at present is idle capacity, there is a persistent demand that the Government's diversification should be extended further and quite substantially. This would necessarily imply permission to all units to produce to their

optimum capacity without any conditions—something that is not easy since it would require changes in the application on the policies towards the established large industrial houses and foreign companies. But this is urgently needed if costs are to be lowered.

There is currently a controversy over the future development of the capital goods industry because the engineer-

ing sector is in the peculiar position of being both the manufacturer and user of capital goods. The controversy is that indigenous manufacturers feel that much needs to be done to cut down on the cost of the vital inputs so that they become competitive; on the user industry side, the feeling is that good quality modern plants, that would probably be cheaper, should be imported.

CONTINUED ON NEXT PAGE

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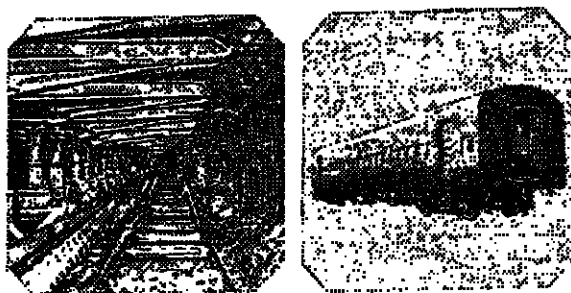
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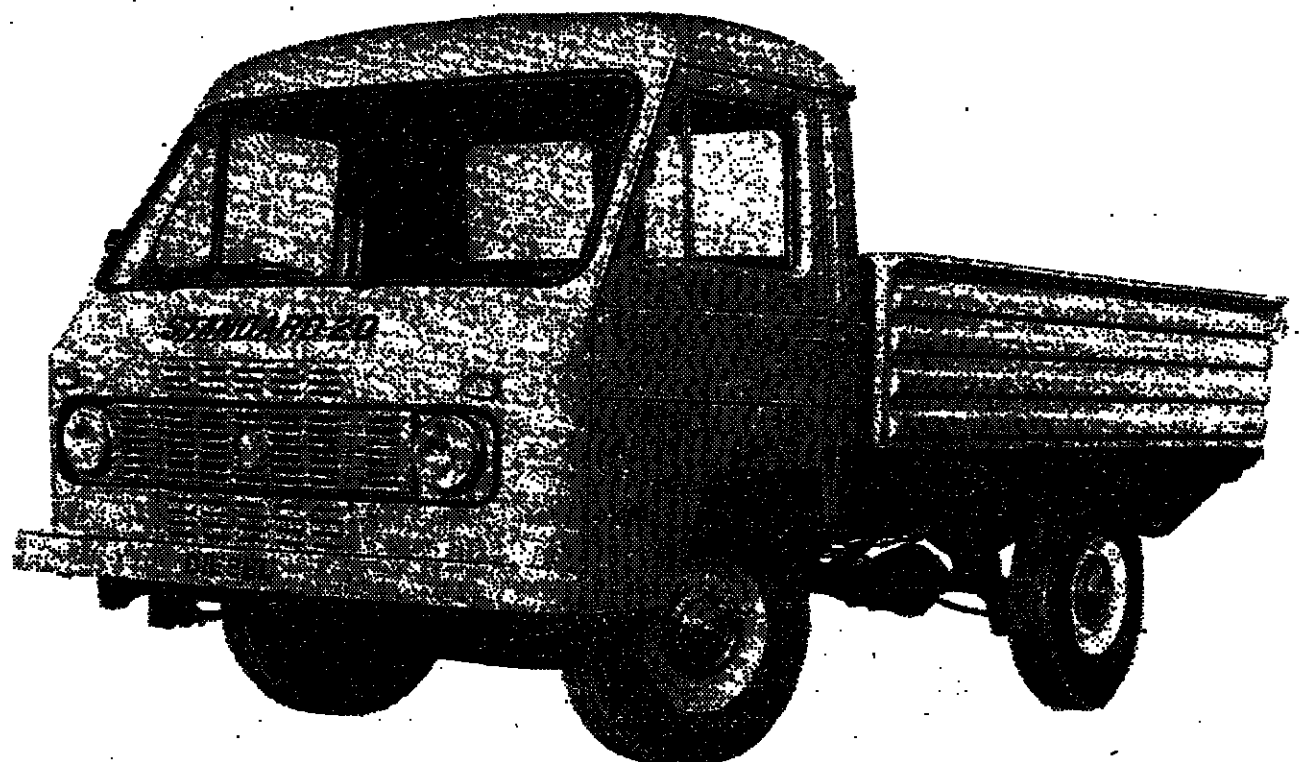
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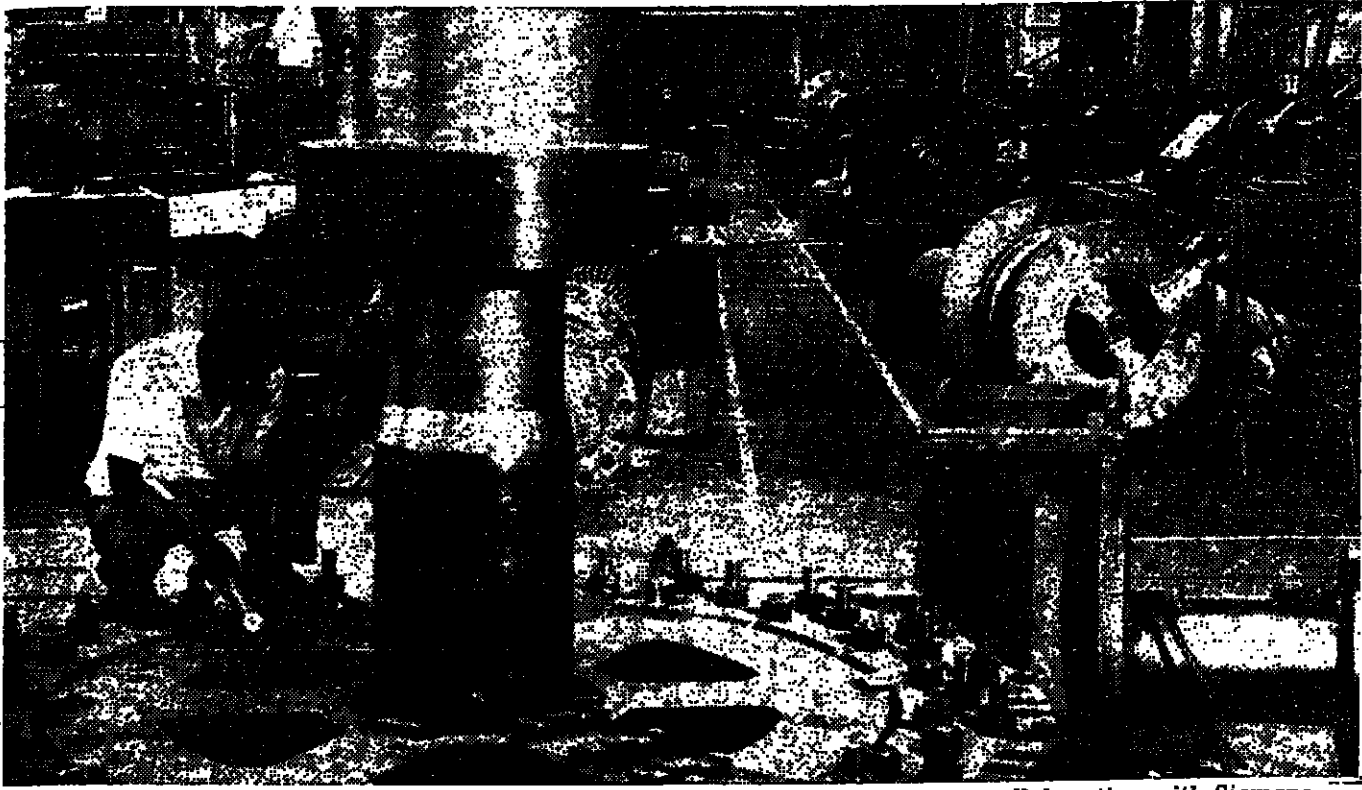
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Work at Bharat Heavy Electricals, Bhopal. The company has been seeking collaboration with Siemens.

Confidence in power equipment companies

INDIA IS growing under unprecedented power cuts and the favourite target for the curses of annoyed industrialists and householders alike is the power equipment maker, Bharat Heavy Electricals (BHEL).

But while Indians profess their lack of confidence in it, BHEL has been winning favour abroad, and last year its exports reached more than Rs 1bn (\$120m) with orders from places as distant as the Middle East, South East Asia and New Zealand.

Making sense of the power situation, let alone of the quality of Indian equipment, is difficult because so many judgments are coloured by emotion and anger at the power cuts and by sharp political controversy.

During the previous Janata Government BHEL came in for much criticism and there was growing talk of the need to look again at equipment and technology from abroad, though because of criticism BHEL's own plans for a 15-year collaboration agreement with Siemens were delayed.

But with the coming of Mrs Indira Gandhi's Government the judgment of BHEL seems to have changed almost overnight. Towards the end of February, Mr A. B. A. Ghaol Khan Choudhary, the new Energy Minister, gave it what the company called "a clean bill".

Decision

The new Minister also discouraged ideas of imports of foreign equipment. According to the Economic Times, the Minister said BHEL was quite capable of meeting the demands of domestic thermal sector and he was against any kind of import of thermal units. His Ministry had taken a decision in principle to discourage any import of power equipment.

In this Mr Choudhary is showing a confidence in the public sector power equipment maker which is not shared by everyone. Senior industrialists are quick to point out that Indian power stations are working at only 48 per cent of capacity compared for example to 75 per cent or above in the UK. The exceptions to the rule in India are significant. The long-

time British-owned Calcutta Electric Supply Corporation is doing well, even as the rest of West Bengal's power stations are doing badly; and the companies operated by Tata Electric, largely by using German equipment, are running at more than 85 per cent of capacity.

As an example of the state of the industry, Tata has been entrusted with the setting up of the first 500 MW thermal power station, for which the turbo-generator has been placed with BHEL but the equipment will be supplied by Kraftwerk Union and specifically made in Germany.

The Minister's statement laid the blame for the poor performance of India's power equipment not on the makers but on operational difficulties worsened by a lack of standard training for engineers, especially at the level of state electricity boards, plus "teething problems" of the new generation of stations of 210 MW. Other problems for which BHEL cannot be blamed are labour indiscipline and union rivalry in the power stations, demoralising patronage and favouritism in managerial appointments, the poor quality of coal and difficulties in moving it.

Yet the fact remains that there are areas where BHEL is weak and would benefit from foreign help. Indeed, by seeking collaboration with Siemens the company itself has acknowledged this. If the statement of in principle discouraging foreign power equipment becomes general government policy it will be hard for the country to get on top of the troublesome power situation.

Closing India to open competition would also destroy the boast of BHEL's commercial director, Mr R. C. Bhargava, that "the U.S. and India are the only two power makers in the world which allow open global competition".

India is also one of the few really big markets in the world for power equipment. Installed capacity now totals 30,000 MW and the target was to add another 18,500 MW by 1983. It is unlikely that such an ambition can be realised, but the annual increases are likely to be considerable. Almost

3,000 MW was added in the last fiscal year. Mr Bhargava predicts that this year and next the figure will be 2,200 to 2,300 MW, but this can then be stepped up to 3,500 to 4,000 MW a year.

In recent years BHEL has taken the lion's share of Indian power equipment orders. In 1978-79, for example, the company produced 2,565 MW of power generating equipment, and of the 3,038 MW added to India's power system that year, BHEL accounted for 2,950 MW or 97 per cent. This brought BHEL's share in India's overall power system to 36 per cent of the installed capacity.

But BHEL is now running up against some of its limitations. The new generation of 500 MW power stations is beyond its experience, and its 210 MW stations have been having extended "teething problems". This is to be expected, and after all even a developed country such as the UK had huge problems with its new generation of 500 MW stations; but for a power hungry country like India there is a need to have the smoothest run possible.

Useful resource

In stations assigned by World Bank loans, a useful resource to a country already spending 40 per cent of its development on power and transport, global tenders will be insisted on.

Mr Bhargava says that international competition is healthy. "India had been a closed market until 1973. This means that we were not at all exposed to international technology. The need for technology upgrading was not before us and there was a great danger of our becoming totally inefficient. While we could get away with it, we don't want to get away with it." BHEL had entered the export market in 1976 for this reason, he said.

Mr Bhargava is pleased that of the 1,800 MW of power station orders recently put out to international tender, BHEL has won 1,200 MW. The other 600 MW, he adds, "is unlikely to come to us." Either Japanese or Italian companies will get the orders. British, American and German makers are too costly, he reckons, even with the most competitive world position for years.

"The export market has been very tough because of a decline in orders in the developed world. Most major power manufacturers except France and India have light order books. Prices of oil-fired stations have come down by 40 per cent over what they were five years ago, and coal-fired stations by 20 per cent. They are almost pricing to cover raw materials, fuel and a bit towards overheads."

This stiffer international competition will probably mean that BHEL will be hard pressed to keep its exports at the \$125m level. When the present orders for Libya, Saudi Arabia, Malaysia, Thailand, Nepal and New Zealand are completed BHEL still has a number of foreign contracts "but not of such good quality".

Indeed, according to Mr Bhargava, BHEL has already lost the opportunity of good orders in Saudi Arabia, Libya, where it has instead joined a consortium because of the delay in starting the Siemens collaboration and improving its technology.

Competition is also helping BHEL to reassess the areas of its strengths and weaknesses. As might be expected, BHEL has an advantage where Indian technology is on a par with world standards and where the labour content of the goods is high. This means that in boilers, built since 1971 under a collaboration agreement with Combustion Engineering of the U.S., BHEL can "secure as many orders as we like subject to the constraint of capacity".

In generators, where there is a lot of winding work, BHEL also has an advantage. But in hydro turbines Japanese prices are close to BHEL's. And in steam turbines and generators of 100 MW and above, Mr Bhargava admits, "we do not have technology which is up to date."

This is why the deal with Siemens was sought: to allow BHEL to improve its technology to be able to build turbo-sets in the range 200 to 1,000 MW as well as to have an association over a longer term to provide continuous development.

The deal invited opposition from a number of different quarters. One was the narrowly chauvinistic ground that it was not necessary for BHEL to tie itself to Siemens or any foreign company. A variant argument more specifically attacked the arrangement of such an all-embracing deal for such a long time with a single company and claimed it would be better to look for variety.

The question was shunted between committees and a committee of four Permanent Secretaries advised rejection, advice which was itself rejected by a later committee of nine Permanent Secretaries which thought the Siemens link should go ahead. It now awaits the new Government's blessing.

Another area where Mr Bhargava believes that BHEL is strong is in supplying to other developing countries. "We have the advantage of more proximate knowledge of conditions and problems and what these mean in terms of what has to be offered to another developing country. In addition 100 MW stations differ from 500 MW to 1,200 MW ones—which is what the industrialised suppliers have graduated to—in terms of sophistication, expertise and maintenance. And coping with breakdowns is part of the learning process," Mr Bhargava said with a smile.

BHEL has already shown its muscle in developing country bidding. It won the turnkey contract to enlarge the Tripoli West power station by 240 MW (2x120) against bids from Germany, Switzerland, France, Japan and the UK. Sometimes there is a political element from which India can benefit. Thus though BHEL does not make gas turbines the Saudi Arabian Government invited it to bid for a gas turbine station after rejecting "extortionate" Western bids.

Strength

Power engineers working outside BHEL did not dispute Mr Bhargava's account of the public sector company's technological strengths and weaknesses. One said: "As far as static equipment is concerned, like transformers and cables, there is absolutely no problem. Where they are having difficulties is in rotating equipment and in building up systems. They lack the experience and underestimate the problems and the time needed to stabilise the new stations."

But the same engineer pointed out another danger: that of concentrating India's power and export hopes on one giant company. With its 60,000 employees and annual sales of more than Rs 6bn BHEL is entering the medium to big league on a world scale. There should still be room, such professionals argue, for new companies to move and supply a competitive element, especially important when the big company is in the public sector and therefore open to political pulls as well as to economic and social ones. Open competition and its bracing effects should begin at home.

To some extent this is happening. Smaller companies, such as Crompton Greaves, NGEF and Tata, continue to export, though their share of the power equipment market is only 20 per cent. Now NGEF, a maker of electric motors, transformers and switchgear, is being helped by technology from AEG and experts outside BHEL say it is beginning to keep the public sector giant on its toes.

There could be good opportunities for more such deals with foreign technology to assist smaller but challenging companies, but their scope depends on the new Government keeping an open mind.

Kevin Rafferty

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Capital goods

CONTINUED FROM PREVIOUS PAGE

With the Government's decision to liberalise some imports, there is pressure to extend the list so that the modernisation process is facilitated while the country's foreign exchange reserve position is sound. On the other hand, the policy has not been availed of (except in the power equipment sector) to the extent thought possible and there are some doubts over how far Indian industry itself is willing to look outside.

The debate continues on the basis that the capital goods industry is full of idle capacity within the country. The other view is that exposure on a selective basis to international standards and competition in the domestic market would help to improve the quality and price of Indian goods and therefore improve the capacity to export. But there is unanimity over the view that imports should be freely allowed when there is a sudden upsurge of demand (again the power equipment example) or when there is need for a higher range of products for which capacity has not been established.

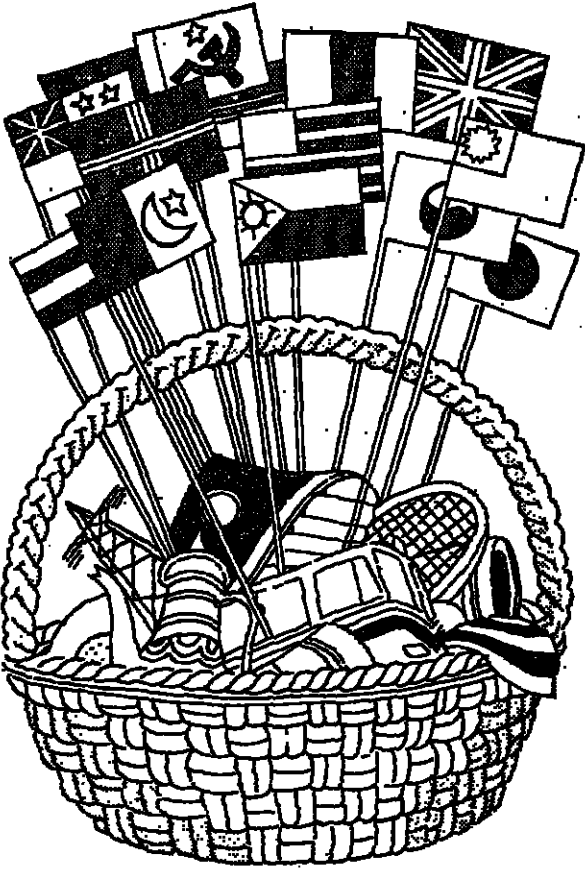
The AIEE study concedes that the indigenous capital goods industry is high-cost. But it puts the blame on the Government and its taxation policies

and points out that the principal reason for the high cost is the heavy excise and import duties on raw materials. The cost of copper for an Indian plant manufacturer is almost 100 per cent higher than for its counterparts elsewhere and the same is the case with zinc, steel, stainless steel and the like. Bearings that are imported are subject to a duty of 150 per cent, alloy steel 75 per cent and all this adds to the cost of capital goods and inhibits orders for them. Yet it is also orders for them that some raw materials like steel plates, sheets, structural, commercial and EC grade aluminium—are cheaper than elsewhere in the world.

Eventually, it is likely that the debate over the import of capital goods will hinge on the degree to which Indian units are able to specialise. The view is gaining ground that India should concentrate on manufacture of a few items in which it has natural advantages and that the emphasis should shift from earlier import substitution to export expansion with units having economies of scale. This commends the view that Indian entrepreneurs should have within their range not only just India but the entire world.

K. K. Sharma

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ENGINEERING

Electronics targets a mixed blessing

IF THERE is one industry that India would like to expand to world scale it is electronics. The ability to produce silicon chips, circuits, software and other equipment, from television sets to guided weapons, is seen in the sub-continent as conferring great status.

What particularly irks India is that it has been left behind not only by the industrialised West—which is to a large degree understandable, given its present rate of development—but it also lags far behind many Third World countries in achievement. There is some pique that countries such as Taiwan, Hong Kong, South Korea and Singapore have all forged ahead.

There are now plans to boost home production of certain lines, but achieving the targets may be a mixed blessing. Some of the targets are so grandiose that there is no domestic industry which could absorb the projected output.

India's problem is that its domestic market is small. While such countries as Switzerland have proved with watches that it is not necessary to have a flourishing home market in order to sell abroad, there is no doubt that most industrial countries do develop products at home and export on the back of this success.

Such a policy is difficult in India because of the low standard of living endured by so many of its people. It has been estimated that just over half the population of 634m has a standard of living below the poverty level. And the poverty level in India was put in 1978 at Rs 65 (about \$3.50) a month in the rural areas and Rs 75 (about \$4.15) in the cities.

With the wages of a farm labourer, for instance, ranging

from 3p to 30p a day, there is not a great deal of scope for selling more consumer durables such as transistor sets.

India produces about 0.5 per cent of the world's output of electronic goods and accounts for about 0.3 per cent of world exports. Last year exports were worth \$22m. By comparison, Japan, the world leader, sold abroad electronics goods worth nearly \$500m and the combined overseas sales of South Korea, Hong Kong, Taiwan and Singapore reached \$250m. This gives some idea of the magnitude of the problem facing India as it seeks a place among the world's leaders.

Bureaucracy

If the Government is serious about its intention of giving India a place in the sun there are certain things it could do immediately which would not cost a rupee. First, it could abolish some of the layers of bureaucracy which do so much to stifle business. An application to undertake almost any project has to be authorised up to half a dozen times by different organisations, with the result that a planning decision can take as long as five years to process.

The Government replies that it does not refuse all that many. But a long time gap between application and authorisation can play havoc with financial projections and inhibits businessmen from even putting forward applications.

There is also a feeling quite widespread in industry that too little appreciation of the electronics industry is held within the Government. This is more a criticism of the Civil Service than the present Congress Party administration though

anxious glances are being cast at the policy on stimulating village industry. The previous Janata Government was thought to be biased against heavy industry and large-scale industry, wanting instead to boost production in the villages.

It is still not clear how far Mrs. Indira Gandhi, the Prime Minister, will go in reversing this policy. Village production is on much too small a scale to bring costs down in the electronics industry, with the result that India suffers from high-cost output in many fields. On top of this, there are heavy duties on imports, especially electronics goods, making their use in the country expensive.

Further, there is a feeling that the Government is antipathetic towards electronics, believing that high technology would aggravate the already serious unemployment problem and that, anyway, who wants more television or who wants colour television?

One sector that is exempted from this feeling is that part of the electronics industry which is producing for the defence sector. In the wake of the Russian invasion of Afghanistan and the American decision to re-arm Pakistan there is likely to be a fresh look at the needs of the country's defence forces. Much of its equipment is outdated: if it is to keep a modern army and air force then it will have to give them more sophisticated equipment.

India is certainly aware of its shortcomings. And it is considering what to do about them.

The Janata Government set up a committee to investigate the industry in December, 1978, under Mr. Mantosh Sondhi, Secretary in the Steel and Mines Ministry, and the committee's recommendation that the Electronics Commission should be replaced by inter-departmental boards caused something of a surprise.

It has been generally admitted that the Commission has held up the decision-making process. But the merit of the Commission is that it has scientists and technicians on its staff, and to replace it—and them—with more civil servants might compound the problems that people want to eliminate.

Concessions

The Sondhi committee took a bold view of imports, advocating a virtually open entry of finished electronic products and technology and advocated further foreign investment in the country, as well as liberal tax concessions for the private sector.

Behind the setting up of the committee was a feeling that the private sector was being denied electronic components at cheap rates and that research and development were being held back. There was, in particular, a worry that growth in the components sectors was particularly slow compared with, for instance, that in electrical equipment.

The important factor now is the reaction of Mrs. Gandhi's administration to the report. The main recommendations run counter to the policy of self-reliance in science and technology which the Prime Minister has always urged. But the need for remedial measures are now so essential that it is possible Mrs. Gandhi will accept some of them.

In one field considerable progress has been made. That is the establishment of a free-trade zone at Santa Cruz, outside Bombay.

The Santa Cruz Electronics Export Processing Zone (com. monly called Seepz) was set up in September 1974 following a government decision four years earlier that electronics was an area where a high growth rate in exports could be achieved. There had been a free-trade zone at Kandala, north Bombay, some years before but



Work at the Indian Institute of Technology, Bombay. India is irked that it has been left behind in the electronics race by many countries

its port facilities were poor and the link with the airport indifferent, limiting both its success and its potential.

Of the 100 acres at the Seepz, Bombay, site, half have already been developed; 47 projects have been approved and 33 of them are in operation. Among the companies operating are Intersil, a leading integrated circuits producer, 90 per cent U.S.-owned; Tata-Burroughs; Systime, 95 per cent UK owned; and Binatone, 98 per cent UK owned. Most of the companies have American antecedents though there are others from France, Denmark, Switzerland, Italy, Hong Kong and two from Japan.

Dispensations

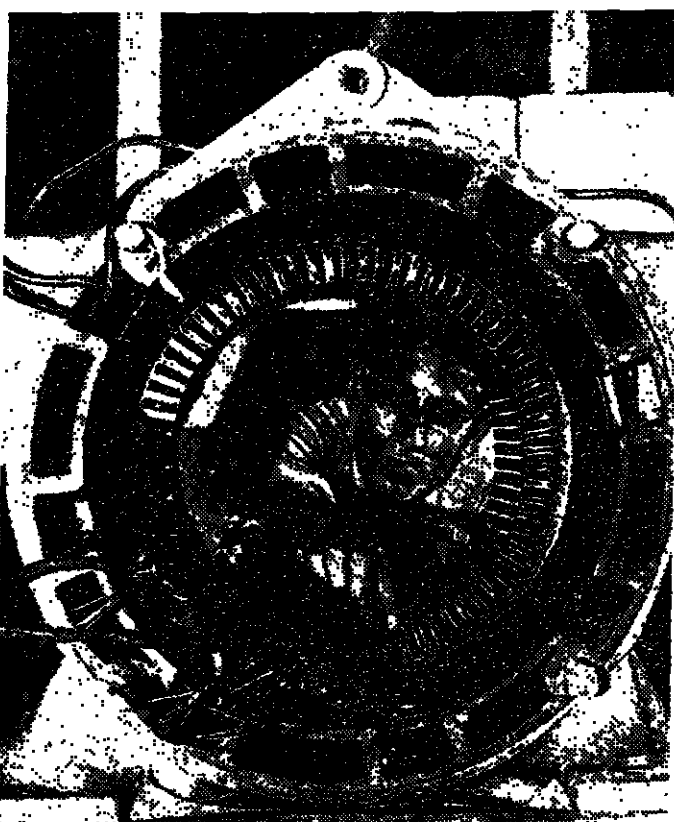
The advantages of a free-trade zone are that all the goods passing into it are free of import duties. There is a total waiver of licensing for the import of capital goods, exemption from customs duties on raw materials, exemption from any State or national taxes and special dispensations with regard to certain local laws.

The intention is that all the goods produced should be exported and so boost India's foreign exchange earnings. The country envisages 4.7 per cent growth in the sixth national plan between 1978 and 1983 so India is looking for 7 per cent growth in exports.

Seepz's contribution so far is minimal. In 1979-80 exports from it are expected to reach about \$5.3m and in 1980-81 they could go to about \$8.5m. This will not contribute very much to the sixth plan.

But Seepz is a start. And it is a welcome move because for once the layers of bureaucracy have been stripped away and decision-taking can be reached quickly—within weeks rather than years. A more serious problem is that other industries have begun to ask why electronics should have been given such preference. This is the sort of problem that any government would welcome.

Anthony Moreton



Rewinding a motor stator at the ICI Alkali Chemical Corporation of India at Rishra, Bengal

PROFILE: BHARAT ELECTRONICS

Recognition from abroad

FOR BHARAT Electronics, the public sector undertaking with headquarters at Bangalore, the first breakthrough in exports came in the mid-1970s. After nearly a decade of catering mainly for the needs of India's defence forces, and the civil electronics industry, the company received an order from the Swiss group of Contraves for radar equipment worth Rs 350m.

The management was overjoyed. "It shows that we are recognised internationally in the field of high technology. Besides it shows that Bharat Electronics can function on behalf of an international corporation as a commercial organisation," says Mr. S. Krishnan, its finance director.

Launched in the 1960s essentially to supply India's defence forces, with the electronics equipment needed for modernisation, Bharat has become a leader in the civil field as well. What began as an ordnance factory has become a modern commercial organisation with an annual turnover of more than Rs 800m.

The company now sells TV tubes and X-ray equipment and caters for Indian Railways and all the electronics needs of such departments as Post and Telegraphs, All India Radio, the police and civil aviation. The order book is more than full and the company is planning two new units at an investment of Rs 300m which will increase its capacity 50 per cent.

Half this capital will be provided by Bharat itself from its own profits, making it one of the few public-sector units

standing on its own financial feet. (Net profits for 1979-80 are expected to be about Rs 100m.) A quarter will come from the Government and the rest from a share issue. A further proposal for setting up a unit to make shells, involving an investment of Rs 250m, is being examined by the Government, which will provide all the finance.

Confidence

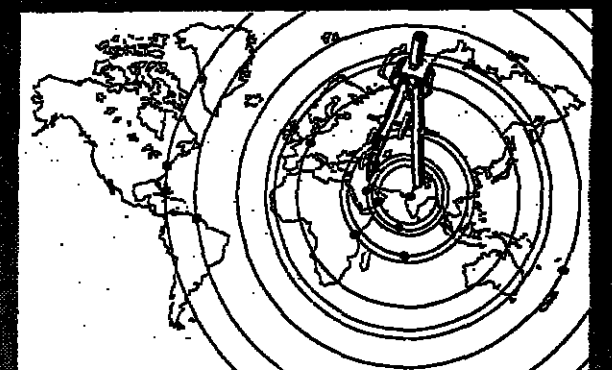
Bharat considers exports vital to its health. Apart from the fact that they improve its balance-sheet, it feels they generate confidence among foreign concerns in its capabilities. Many have approached Bharat to accept subcontracts; these include European groups like Contraves which want not only joint production but also co-operation in research and development.

The Europeans have won so many contracts from the Middle East (especially defence contracts) that they do not have the capacity to carry them out. Their search for a reliable foreign partner has led to Bharat. "The 1980s look very attractive for us," says Mr. Krishnan.

Bharat has developed all the modern communications in use in the Indian Army, Air Force and Navy. Its representatives are reluctant to disclose items but say proudly that they are being exported to the Middle East as well as to Europe. The latest is an order from Denmark worth Rs 80m.

K. K. Sharma

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Drug shortage stems from price policy

INDIAN DRUGS are among the cheapest in the world, according to a recent study conducted by the Organisation of Pharmaceutical Producers of India (OPPI).

Despite the escalating costs of raw material inputs and packaging materials caused by OPEC's petroleum price rises, prices of end products have been rigorously held down by Government policy, resulting in an acute shortage of many essential and life-saving drugs.

The drug industry has been clamouring for months now for the situation to be rectified. It points out that profitability of the industry and particularly the multinational drug companies, has come down steeply. This has had a major impact on new investment in the industry.

Yet considerable expansion has to take place if the Government's production targets are to be met. Production of bulk drugs today is about Rs 2,000m (Rs 109m) and this must increase to Rs 4,750m in 1982-83 to satisfy requirements. This does not include estimates of Rs 1,800m in imports by that date.

The current output of formulations is around Rs 10,000m (Rs 549.4m) and the Government wants this to increase to Rs 18,750m in 1982-83.

So priority is being given to the price question by the Ministry of Petroleum and Chemicals with the idea of encouraging higher production to meet future requirements. An announcement of bulk drug price increases is expected within the next few weeks. Formulation prices will necessarily have to go up as well.

Guidelines

However, not all drugs will be subject to the same increases. Essential drug prices may still be artificially depressed while non-essential drugs are allowed large percentage increases.

Guidelines for the price increases were laid down in the 1979 Drug Price Control Order, which has still to be implemented. It allows for a 12-14 per cent return on net worth in the case of bulk drugs and an 8-10 per cent return on net worth in the case of formulations.

"This is almost the same

profitability obtainable in fertilisers, cement and other industries here," explains a drug industry source.

The level of equity foreign drug companies will be allowed to retain is also to be decided shortly. Much depends on how much their processes involve high technology.

Eight foreign firms manufacturing formulations and making no bulk drugs have been asked to reduce their foreign equity holdings to 40 per cent under the Government's new drug policy. These companies are Beecham India, Abbott Laboratories, Anglo-French Drug Company, C. F. Fulford, Indian Schering, Smith Kline and French, Nicholas India and Carter Wallace.

There are 24 foreign firms producing one or more bulk drugs. Studies of their 207 processes by the high-level Government Committee on Dilution of Foreign Equity, which was set up in April 1978, showed 93 involved high technology. Two of these 24 companies have been asked to bring down immediately their foreign equity to 40 per cent. They are Richardson Hindustan and Whiffens. Another company, Subrid Geigy has already divested itself of its entire foreign holding.

There are 21 companies left, including giants like Glaxo, Sandoz and Parke Davis, where permissible levels of foreign equity have still to be decided.

The Government Committee on Equity Dilution, looking to the future, has laid down general guidelines for assessment of drug technology for when foreign companies apply for industrial licences. The major objective appears to be the eventual Indianisation of all foreign drug multi-nationals.

India, in fact, has come a long way since the 1940s, when most of the bulk drugs were imported and only processing and formulations were carried out in the country. Now most of the bulk drugs are manufactured indigenously and India ranks second to Brazil in drug production in developing countries.

However, per capita consumption is still half that of many developing countries, \$1.6 compared with China's \$3,

for instance, or Malaysia's \$4.27.

To reduce bulk drug imports and encourage orderly development of the industry, two public sector projects were set up — Indian Drugs and Pharmaceuticals Ltd (IDPL), which now accounts for 30 per cent of the country's production of basic bulk drugs, and Hindustan Antibiotics. The public sector now provides about 20 per cent of the total bulk drugs and formulations produced in the country.

"Although all the top Western drug manufacturers were here, they were mostly producing the formulations," explains IDPL's chairman and managing director Dr. K. L. Behl. "IDPL filled the gap in production of bulk drugs."

Today, the public sector provides less than 10 per cent of formulations, but expansion plans being put into effect should double this market share.

Dominant role

The Soviet Union played a dominant role in providing technology for the manufacture of antibiotics and sulphur drugs in the early years under agreements signed in 1962, and also provided for the training of Indian personnel. However, IDPL points out that the levels reached by the Russians in drug technology are far from those reached by the West, and that in future it will have to depend more on itself or look beyond the Soviet Union for the latest know-how.

For its synthetic penicillins, Erythromycin and Doxycycline, IDPL went to the West. However, the Indian drug manufacturers resent the fact that Western companies keep technology transfer at limited levels and so keep them "eternally dependent."

As IDPL began producing different drugs and formulations, price levels buoyed by the multinationals started dropping dramatically. The price of tetracycline capsules, for instance, was cut by two thirds despite a doubling in the bulk price of the material. "So you see how much profit the multinationals were making," said Dr. Behl. "This is a poor country and

people cannot afford to pay those prices."

In certain cases, a number of IDPL's 150 formulations are being supplied to Government institutions and hospitals at much lower rates than market prices.

With the mastering of production of 55 basic drugs (and the development of technology for 80 more by its R and D division) IDPL is now able to offer its consultancy services to other developing countries.

In Algeria, for instance, the company is providing technical consultancy services for setting up projects in the chemical-pharmaceutical sector. In return for this help, and consultancy advice in other fields, Algeria has agreed to consider an Indian request for the supply of oil on a long-term basis under long-term credit arrangements.

IDPL's export of knowhow to Algeria is particularly significant in view of Algeria's previous dependence on assistance from the West in core sector industries.

IDPL is also assisting Royal Drugs of Kathmandu, Nepal, with detailed engineering and supervision services for production of formulations. The company hopes for more such consultancy work and has offered assistance in setting up pharmaceutical plants in Thailand, Afghanistan, Iran, Abu Dhabi, Guyana and Nigeria. It is particularly keen to get into the West Asian market, but has so far had no positive response.

IDPL is currently doubling the capacities of its synthetic drug plant at Hyderabad and its antibiotics plant at Rishikesh to 3,856 tonnes a year and 548 tonnes a year respectively. Work should be completed by the end of this year and other units are coming up. Some new antibiotics apart from its present product mix—synthetic penicillins (Ampicillin, etc.), Erythromycin—will start being produced at Rishikesh by the middle of this year.

The company is importing the latest technology for its Rishikesh plant for production of potassium penicillin, synthetic penicillins, tetracycline, Erythromycin and Doxycycline in bulk form from Farmafin of Italy.

Pearl Marshall

Oil imports becoming an impossible burden

INDIA's foreign exchange reserves, rising steadily for the past four years mainly because of remittances from Indians working abroad, have absorbed the impact of the heavy oil import bill. This has led to a deceptively complacent situation that has hidden the real nature of the near-impossible burden of oil imports.

Largely because oil imports, which were worth about Rs28bn in 1979 and could go as high as Rs45bn this year if OPEC prices continue to soar, the reserves are finally dipping. By the end of the year the oil imports could make such a dent in the reserves that the complacency that their size has given rise to could be shaken off quickly.

Oil imports in 1979-80 are expected to account for a massive 45 per cent of total export earnings and so easily constitute the single largest item in the import bill. If the trade deficit reaches the expected Rs20bn in the current financial year, it will be due mainly to oil imports and, of course, other commodity imports taken up with the slow growth in exports this year. This is despite the fact that, for India's size and industrial position, consumption is surprisingly low at roughly 30m tonnes a year, which puts the sub-continent in the lower league of oil purchasers.

Of this, roughly a third is actually produced within the country in on-shore fields in the north-east and in Gujarat as well as the recently-developed offshore finds in the western continental shelf. Efforts are being made to increase internal production but these require heavy investments and have been held back by local political troubles in Assam where production came to a near standstill recently because of picketing by local people over the issue of registration of "foreigners" in the electoral rolls.

This will undoubtedly blow over and, it is hoped, oil production will return to normal. But it serves to remind planners of the continued dependence on imports, a dependence that is so heavy that the turmoil in Iran and the fall in production internally has left the country with an alarming shortage of diesel and kerosene fuel that is harming both industrial and agricultural production apart from aggravating transport difficulties.

Therefore, willy nilly, India must continue to look outside for its oil needs. The constant efforts of officials in the Ministry of Petroleum are to ensure that contracts are tied up in

advance for the year so that the agreements reached at Government-to-Government level enable purchase of crude at official OPEC rates than at the high spot prices that an emergency would require (as it did for substantial amounts last year during the Iran shutdown).

Estimates this year are that about 20m tonnes of crude will need to be imported plus another 2m tonnes of refined products, such as diesel. If the production of processed products in the eastern refineries continues to decline, imports may have to be raised and this is a constant worry. Yet if the economy is to be gingered up, imports of crude and petroleum products are unavoidable and so the search for reliable suppliers must continue.

Negotiations

Mr. P. C. Sethi, Petroleum Minister, says that so far agreements for the supply of 15.5m tonnes have been fixed up and negotiations are in progress to take up the remaining quantity needed. Suppliers include the traditional sources such as Iran, Abu Dhabi, Iraq and Russia, but feelers are being made to countries like Nigeria, Indonesia and even Mexico while Saudi Arabia is expected to make its normal contribution of 1.1m tonnes.

Even Libya, while last year suspended supplies because of differences over interpretation of the agreement with India for exchange of nuclear knowhow, is expected to resume shipments.

But the Iranian crisis, which at one time threatened to result in the closure of a number of Indian refineries, has caused so much worry that the Indian Government will not feel really safe unless more than the required quantity is tied up. Hence, the continued efforts to cultivate the Arabs since has

So far, the biggest slice has come from Iraq, which provided 6m tonnes last year and has promised the same amount this year, filling the gap caused by Iran—and this remains the most reliable source since political relations between Baghdad and New Delhi have improved swiftly.

But there is evidently a feeling of uncertainty about other sources. Saudi Arabia is a limited supplier and could prove erratic because of the Afghanistan arising out of the pressure on India to accommodate Pakistan.

Iran, which should be the main supplier, is equally uncer-

tain as a source. Hence the frantic trips made by Indian Ministers and officials to Mexico, Venezuela, and even China for new sources of supply. The situation will have to be watched from year to year (possibly month to month) for a long time.

Conscious of the need to minimise dependence on imports, the Government has decided to intensify efforts to increase production from India's own fields. Exploration and drilling for oil is now taking a major share of public-sector investment. A nationwide seismic survey has been made with the help of Russian experts. Provisional figures of crude reserves are 310.37m tonnes, and of natural gas 235.74m cu. metres.

There was a debate in progress over whether the reserves should be preserved, until OPEC prices become impossible for the country to pay. The debate ended abruptly when OPEC prices rapidly reached this level last year. The decision to conserve the reserves has been quickly abandoned. Planners are now agreed on the need to tap whatever oil is possible, especially as India's already critical energy situation has been exacerbated by electricity generation problems owing to constraints on coal production.

The exploration is being done by the Government-owned Oil and Natural Gas Commission (ONGC) which is operating in the offshore regions of the western continental shelf—where important fields like Bombay High and Bassein have been found—and onshore in Gujarat. Oil India, owned jointly by the Government and Burmah Oil, operates in North-East India, although it recently won an offshore concession in the Mahanadi Basin in the Bay of Bengal where operations have begun.

Total production of offshore and onshore fields last year was about 11m tonnes, of which Bombay High accounted for about 4m tonnes. This is India's most dramatic find, which was developed within three years of oil being struck in 1975. Since the decision to slow down production from this expensive source has been reversed, heavy investment is in progress to ensure the maximum possible output from Bombay High and the structures in its vicinity. The current throughput of about 100,000 barrels a day is to be raised to a high 140,000 barrels after the next monsoon.

According to the present schedule of operations of ONGC, the production level by May, 1982, will reach its peak of 12m tonnes a year, which is substantially higher than the 10m tonnes estimated earlier—by the mid-1980s. This optimum level will be maintained for some years until the reserves there are exhausted, and this should help to meet at least half the country's needs at that time. Production from Assam and Gujarat oilfields, exploited by Oil India and ONGC respectively, has at present stabilised at roughly 3.5m tonnes each.

But new strikes are being made and, given a bit of luck, India's hopes to meet even more than half its crude needs by 1982 may not be too optimistic. The trouble is that consumption is difficult to curb. The only restriction possible is on petrol which, in a country still in the bicycle age, can be saved only marginally in overall terms. The bulk of consumption is from either industrial users of furnace and fuel oil and asphalt or from agriculturists who need middle distillates such as diesel to fuel their irrigation pumps.

In fact, despite all efforts to limit its consumption is rising at a minimum rate of 9 per cent a year and this is ominous. Since coal, the main other source of energy, is in short supply, reliance on oil cannot be avoided no matter how much the strain on the foreign exchange reserves and howsoever much OPEC raises its prices.

Mixed luck

Hopes must therefore be pinned on finding new fields quickly and exploiting them as rapidly and successfully as Bombay High. Unfortunately, India has had mixed luck with oil discoveries. Gujarat and Assam are throwing up new oil-yielding wells as soon as others become dry but exploration in other states has not yielded results so far.

Last November, a new major find, also in the western continental shelf, at Ratnagiri was announced. This is potentially as big as Bombay High and the first exploratory well is yielding about 7,000 barrels a day. More wells are to be drilled to determine the dimensions of Ratnagiri but, no matter how promising this proves to be, exploration successes have to increase if oil is to be less burdensome for India.

K. K. Sharma



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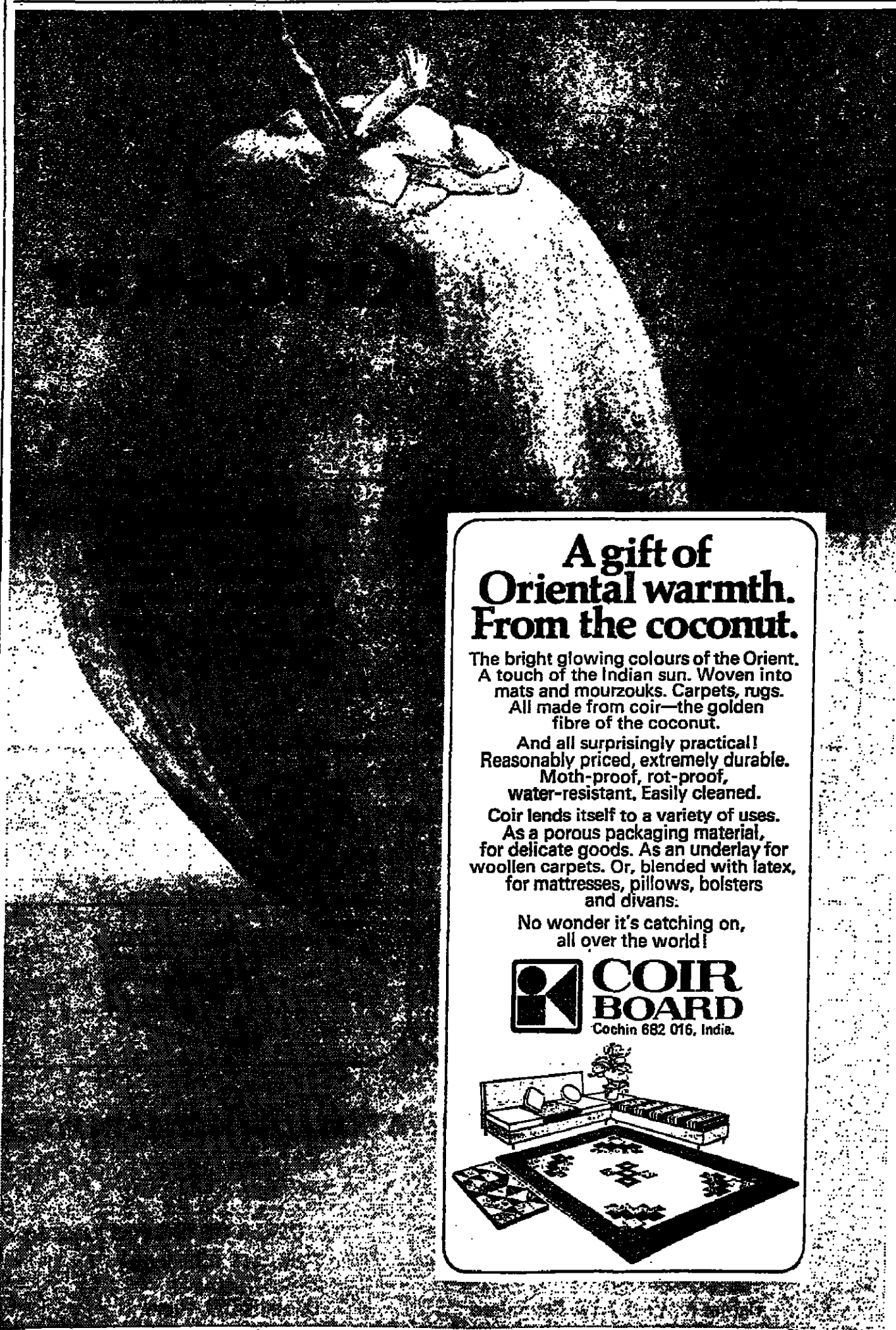
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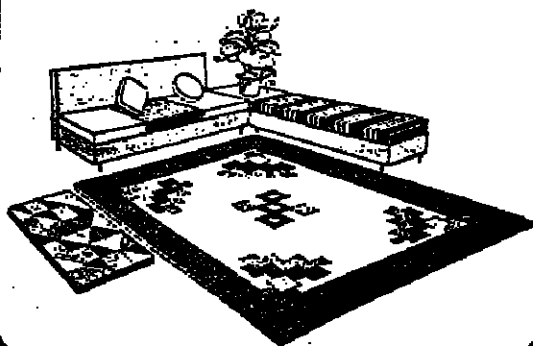
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Setbacks in fertiliser output

INDIA IS looking for opportunities to participate in fertiliser plants in the Gulf States and overtures have been going on for some time now with three or four countries. Any deal would include "buy back" arrangements so that India could help satisfy its large and continuing requirements for fertiliser imports.

For industry sources feel that nitrogenous fertiliser shortages of more than 1m tonnes annually will continue well through the 1980s. They point to the higher prices of imports and escalating shipping freight charges.

India's demand for nitrogenous fertiliser this fiscal year has been about 3.7m tonnes, while production has barely reached 2.4m tonnes, despite an installed capacity that has rapidly increased from 3.25m tonnes six months ago to 4.5m by the end of this month. The difference between consumption and production means, in effect, a 58 per cent dependency on imports.

In five years' time (1984-85) the total annual nitrogenous fertiliser capacity will amount to about 6.5m tonnes but if plant operation continues to be dogged by the present overwhelming constraints, production will amount to only 4.5m. As demand will also be around 6.5m tonnes at that time, India will face an import requirement of about 30 per cent, or 2m tonnes.

Optimistic

But this assumes that the nitrogenous plants will still only be running around 60 per cent of capacity, the highest utilisation rate reached so far. If optimistic forecasts of an 80 per cent capacity utilisation by that date by the Ministry of Chemicals and Fertilisers are to be accepted, then imports would need to supply only 20 per cent of consumption (1.3m tonnes).

The constraints this year on production have been enormous. As Dr. S. S. Bajaj, chairman of the Fertiliser Association of India (FAI), put it, there has been a "large scale infrastructural failure" including shortages of power, coal and transport. The result has been a setback after four successive years of large increase in production and consumption.

The country's worst drought

in 60 years not only reduced the amount of crop acreage planted, and therefore affected fertiliser usage, but also dramatically lowered reservoir levels and caused problems in hydro-electric generation.

In addition, labour unrest in India's north-eastern oil and gas-producing region led to fuel scarcities. Coal production was also way below expectations and thermal plant operated at only 46 per cent of capacity instead of the planned 55 per cent.

Because of these factors, various states imposed a variety of power cuts on industry ranging up to 100 per cent.

The four new fuel oil-based plants commissioned this fiscal year, Panipat, Nangal, Sindri and Bhatinda, have been hit by severe shortages of fuel oil.

Steep power cuts imposed by the Uttar Pradesh government have all but shut down the public sector Fertiliser Corporation of India's Gorakhpur plant (naphtha-based) and Indian Explosives' Kanpur facility (also naphtha-based).

Both of the country's coal-based plants—Ramagundam in Andhra Pradesh and Talcher in Orissa—have suffered commissioning delays because of power shortages, but went into production officially on January 1 and 4 respectively. The Talcher plant (228,000 tonnes nitrogenous capacity) had to be shut down completely for a one month period after trials in September.

India currently has 32 nitrogenous fertiliser plants listed as being in commercial production by the end of this fiscal year, although several of them may not in fact be producing because of the constraints.

Another two are due on stream later this year—Hindustan Fertiliser Corporation's Haldia plant based on fuel oil, and Rashtriya Chemicals and Fertilisers' Trombay plant in Maharashtra based on natural gas—and June, next year, should see operation of Gujarat State Fertilisers' Brouch plant based on fuel oil.

Future plants are being planned around gas from Bombay High and South Bassin on the west coast, and decisions on further coal plants will be held in abeyance until Ramagundam and Talcher have proved themselves.

There is a coal project at

Korba in Madhya Pradesh, for instance, that is now in cold storage.

Much depends on economics. The coal plants are more expensive to build, but the feedstock is cheaper.

"If they run as well as the gas-based plants, then they will be economic," says a Petroleum Ministry official.

Of the gas-based projects, four 1,350 tonnes per day ammonia plants based on Bombay High gas have been cleared by the Indian Government's investment board and the Cabinet. Total costs will run to well over \$1.5bn with a foreign exchange component of at least \$500m. The World Bank, the UK and Japan are helping with financing.

Plants for two other smaller units in the States of Assam (Basedon gas) and Uttar Pradesh (Basedon naphtha) are also moving forward.

Two of the giant plants will be set up at Thal Vaishet in Maharashtra by Rashtriya Chemicals and Fertilisers, and the other two at Hazira in Gujarat by Indian Farmers' Fertilisers Co-operative (IFFCO).

The design will be by C. F. Braun of Alhambra, California. However, the Thal Vaishet project is now undergoing considerable delay while the Petroleum Ministry renegotiates the consultancy fee and cost of technology. "It could take another six months," says one Ministry source.

Tenders

Tenders of four or five international companies for technology and consultancy work for Thal Vaishet's three 1,500 tonnes per day streams of the urea plant are also being reviewed. The original bidders included Chiyoda of Japan, Foster Wheeler, Humphreys and Glasgow, and Kellogg of the UK

and UHDE of West Germany. But where the Hazira complex is concerned, "we are now making a flying start," says Mr. Paul Pothier, IFFCO's managing director, "and will start manufacturing fertiliser by 1983."

The complex will not be totally completed, however, until the first half of 1985.

The Government also proposes to set up six more 1,350 tonnes per day fertiliser plants in the next 10 years on the west coast utilising natural gas from Bombay High and South Bassin.

Recommendations by a Petroleum Ministry working group set up to evolve a distribution pattern for the Bombay High gas are currently being examined by the Public Investment Board in New Delhi.

Apart from benefiting the Maharashtra and Gujarat plants, the gas will also be carried through a Rs 7,500m pipeline

system to the states of Madhya Pradesh, Rajasthan and Uttar Pradesh.

India plans to power all its future fertiliser plants, including the four gas-based plants already approved, with captive coal-based units. The coal boilers will be designed to operate on natural gas in emergencies.

Where phosphatic fertilisers are concerned, production will be around 0.75m tonnes this fiscal year (1979-80) compared with the expected 0.84m tonnes.

This means that production has stayed roughly the same as 1978-79. Yet phosphatic fertiliser production increased 15.7 per cent in 1978-79 over the previous year, due mainly to better performance of some of the existing units (capacity utilisation was 71 per cent) and also added production from Trombay IV.

Pearl Marshall



Nitrogenous fertiliser shortages are expected to continue in the 1980s. Urea plant at Ahmedabad, Gujarat

Scope in petrochemicals projects

JUST WHEN India will launch the three major petrochemical projects envisaged in its now defunct sixth development plan is uncertain.

"They require a lot of investment [\$2.5bn] and then you have to promote the market," says a Petroleum Ministry official. "Certainly there is no rush—not like on the fertiliser industry front, for instance. At the moment we are much more concerned about kerosene and diesel supplies."

Former National Planning Commission member Raj Krishna, adds: "Since Charan Singh's Prime Ministership there has been no decision-making and this continues. The Planning Commission has been dismissed and the sixth plan scrapped. There has been a general economic policy holiday—no plan, no budget, no industrial policy, just noise."

The general view is that demand projections in the petrochemicals sector have shifted into the future following a dearth of capital investment and major setbacks in production in most industrial sectors. The other two projects in the original sixth plan, which was

and power. Oil price increases and their effect in naphtha prices (a 145 per cent spurt in the ex-factory price of naphtha last August for instance) have also increased downstream product prices and dampened demand.

The most exciting of the three planned projects is the \$1bn or more complex involving a 500,000 tonnes a year ethylene plant based on Bombay High and South Bassin gas, or its alternative, two smaller units (300,000 tonnes and 225,000 tonnes per year).

Two States are competing for this gas and both State companies—Maharashtra State Petrochemicals Corporation of Bombay and Gujarat State Petrochemicals Corporation of Ahmedabad—have contracted Engineers India of New Delhi to prepare viability studies identifying product patterns and site locations.

Downstream products are likely to be 200,000 tonnes LDPE, 80,000-100,000 HDPE, 200,000 PVC, 60,000 PS, and 80,000-100,000 ethylene oxide. The other two projects in the original sixth plan, which was

to have run from 1973-1983, call for recovery of propylene from off-gas at four public sector refineries, which would allow a phenol capacity of around 40,000 to 50,000 tonnes as well as a 2-ethyl hexanol capacity of 40,000-50,000 tonnes and the processing of 6m tonnes of Bombay High crude at two refineries to produce around 300,000 tonnes of benzene and 200,000 tonnes of xylenes.

Participation

Certainly, when the projects are ready to be funded, there will be plenty of scope for foreign process licensors and engineering contractors.

India's philosophy on foreign participation in its petrochemicals industry became clear during construction of its one and only major public sector petrochemical complex in operation at the moment, the \$500m Vadodara facility in the north-western State of Gujarat. It was formally inaugurated last March.

Indian companies worked with foreign equipment manu-

facturers and various Government and private research organisations. International process licensors provided the minimum basic package and gave support assistance for detailed engineering.

The licence for IPCL's DMT process, for instance, was obtained from Dynamit Nobel of West Germany, through Krupp, while the basic engineering was carried out by Krupp. But the detailed engineering, procurement and construction supervision was undertaken by an Indian public sector enterprise. Engineers India and another Indian concern, Bharat Heavy Plates and Vessels designed and fabricated some of the equipment such as distillation columns, heat exchangers and pressure vessels.

Dr. S. Varadarajan, chairman and managing director of the operators, Indian Petrochemicals Corporation, describes Vadodara's inauguration as the "coming of age" of organic chemical technology in India. The construction provided a fillip to the country's entire engineering and fabrication industry. Some 60 per cent of

the total mechanical equipment was supplied indigenously, 95 per cent of the electrical equipment and 45 per cent of the instrumentation.

Naphtha cracker

The naphtha cracker, licensed from Lummus UK, has a capacity of 130,000 tonnes a year ethylene, 38,000 tonnes polymer grade propylene and 33,240 tonnes of chemical grade propylene. Licensor for the 63,900 tonnes a year pyrolysis gasoline hydrogenation unit was the Institute Français de Pétrole, in association with the Indian Institute of Petroleum, while Universal Oil Products of the U.S. was licensor for the 23,600 tonnes benzene extraction unit and the 22,000 tonnes butadiene extraction unit.

Apart from Vadodara, the Government has two more public sector complexes under way, one under construction and one at the letter of intent stage. The Bongaigaon refineries and petrochemicals complex in Assam in north-eastern India has a 45,000 tonnes capacity in DMT plant (already let out to

Krupp Koppers), a refinery (already under construction) and a 30,000 tonnes a year polyester staple fibre plant.

As for the second project, the Haldia petrochemical complex in West Bengal, a Petroleum Ministry spokesman said that there was talk now of independent financing, with collaboration from foreign companies.

"This is because the State Government wants it as its own project, and does not want central government involvement," he explained.

West Bengal Industrial Development Corporation has appointed C. V. Braun, working with Industrial Consulting Bureau of New Delhi, to evaluate bids for the various units that have been received from companies in West Germany, the UK, France, Italy and the U.S. Products will include 62,330 tonnes a year ethylene, 45,000 tonnes pvc, 30,000 tonnes high density polyethylene, 3,000 tonnes ethylene oxide, 12,000 tonnes ethylene glycols and 25,000 tonnes ethi hexanol.

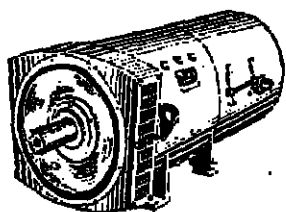
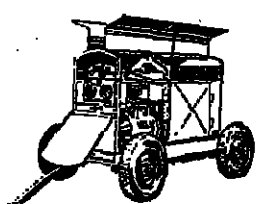
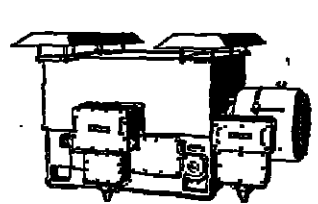
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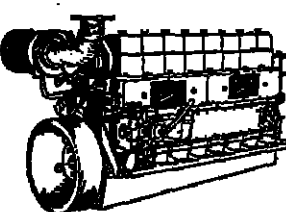
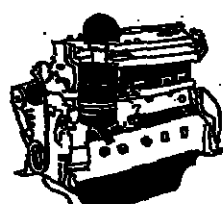
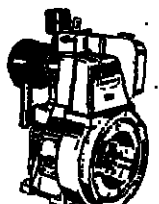
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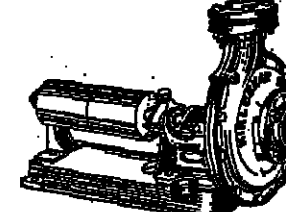
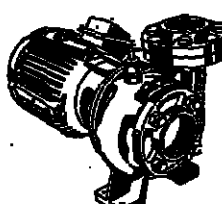
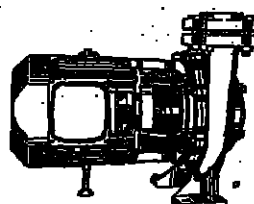
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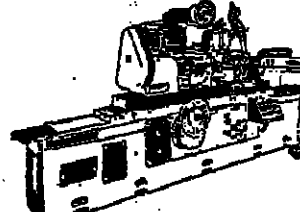
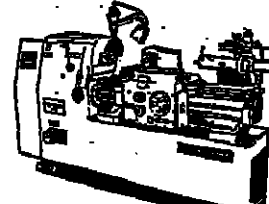
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THE GOVERNMENT'S MERSEYSIDE REGENERATION PLAN

BY ANTHONY MORETON

A quango walking on troubled waters

A RIDE down Liverpool's south docks road must be one of the most depressing experiences in Britain. The buildings stand gaunt, empty and derelict. It's like New York's lower east side without the people. From Pier Head, within a stone's throw of the centre of the city, to Toxteth the monotonous gloom is unrelieved.

North of Pier Head, up into Bootle, things are better. The buildings still look as though little has been spent on them since Victorian times, but at least there are ships moored, lorries loading and unloading and other signs of activity. And at Seaford the busy container terminal shows what can happen.

This whole waterfront is now the subject of an enormous row which has broken out involving Mr. Michael Heseltine, the Secretary for the Environment, Merseyside County Council, Liverpool District Council and several other councils.

It concerns who should have responsibility for undertaking the massive development programme that will be necessary to inject life into this once prosperous area.

Just as the county council began to get to grips with the run-down area—probably one of the worst examples of urban dereliction in Britain—Mr. Heseltine has stepped in and set up a superpower, an urban development corporation (a sort of new town under a different banner), to mastermind its conversion. To lead the operation, Sir Keith Joseph's Industries Department has leaked the idea that part of the area at Speke is under consideration for designation as one of the country's enterprise zones, where businesses will be free from such irksome constraints as those apply for planning controls or pay rates. How this squares with

Mr. Heseltine's ideas is not at all clear.

The proposal for an urban development corporation immediately led to a great row between the Conservative-controlled Merseyside County Council and the Minister. Harsh things were said about the Minister in the city. And Liverpool District Council, the Labour-controlled second-tier authority, stirred the pot by making it plain it had little sympathy with the county and not much more with Whitehall.

But suddenly, earlier this month, to everyone's surprise, Mr. Heseltine won over his most severe critics. Sir Kenneth Thompson, Tory leader of the county council, Sir Kenneth is to become deputy chairman of the urban development corporation under its chairman, Mr. Leslie Young, the chairman of J. Bibby and a highly respected industrialist in the city.

Combination

Mr. Heseltine has set up two urban development corporations, one to cover London's docklands and the other for Liverpool. In each case he has followed the same pattern over appointments. In London he asked Mr. Nigel Brookes, chairman of Trafalgar House—the property—shipping—news-papers group—to be its head and Mr. Bob Mellish, ex-Labour Minister, to be its number two. In Liverpool the businessman-politician combination was repeated with Mr. Young and Sir Kenneth.

The need for an active politician is obvious. The work of each urban development corporation will cut very much across—and take powers from—the local authorities in the area. In London five boroughs and the Greater London Council are affected. In Liverpool, Sefton and the Wirral and the county.

The businessman is there to satisfy Tory principles and to overcome objections from the Tory backbenchers in the House of Commons that Mr. Heseltine is introducing socialism by stealth. For the corporations will be quangoes; and they will pour hundreds of millions of pounds—much of it government money—into run-down areas.

The businessmen are there also to try to interest private developers and private money into projects.

But it is the politicians' role that is by far the more important. They have to smooth over the local authorities. If these new quangoes are to be successful they will need a degree of co-operation from the local councils. If this co-operation will be difficult to obtain in London, it will be doubly so in Liverpool.

Here the role of Sir Kenneth is all-important because of his implacable opposition to the establishment of an urban development corporation until the very last moment. He said some very nasty things about it. One of the more polite, as he freely admits, was that "an urban development corporation would be another quango and one to dissipate resources and cause delays".

So why did he change his mind? To answer this one has to understand his background.

In local politics Sir Kenneth, at the age of 70, is a very senior figure. For 14 years he represented Liverpool's Walton constituency at Westminster; for five of those years he was a junior minister, first as Assistant Postmaster General, later Parliamentary Secretary at the Ministry of Education.

It is not usual to find council leaders who have spent time at Westminster, still less usual to find an ex-minister in the council chair. One thing that Sir Kenneth learned during his years in central government

was the necessity of bowing to the inevitable and then administering the inevitable for the good of the community.

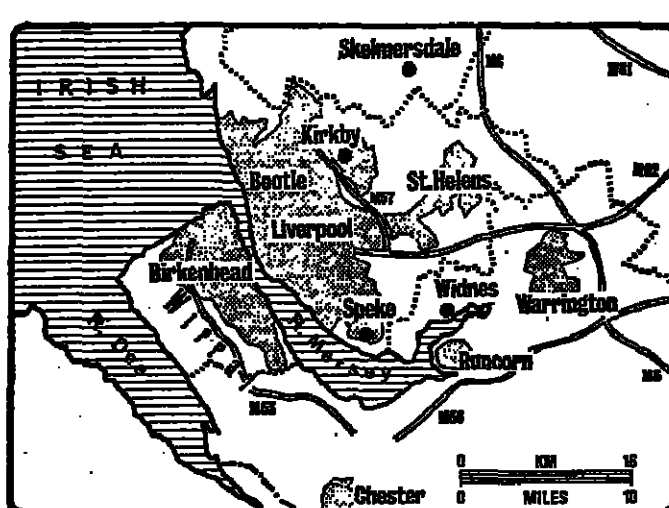
It is clear that Sir Kenneth is still not fully convinced that Merseyside needs an urban development corporation but he understands that Mr. Heseltine intends to introduce one. The best course, as he sees it, is to co-operate with the inevitable.

One of Sir Kenneth's major tasks will be to placate Liverpool District Council. The antipathy between county and district goes back to local government reorganisation in 1974. Before 1974 Liverpool was a big city; it had a lord mayor and was sovereign within its own borders. Now it is a district, no different from its neighbours, Sefton or St. Helens or the Wirral. The districts run education, housing, social services, libraries and parks but the county is responsible for the police, fire brigade, Liverpool airport, art galleries, the Mersey tunnels and, most important, industrial development.

Resentment

Since Liverpool has no responsibility for industrial development it does not mind a super authority coming in to take these powers away from the county. The county strongly resents losing them, especially as it has taken the lead in doing something about the derelict docklands.

The docks actually belong to the Mersey Docks and Harbour Company, successor to the Mersey Docks and Harbour Board which collapsed in the early 1970s with big debts and had to be financially restructured. The company has managed to attract some small concerns into the old warehouse in the south docks but little has been done to the general appearance of the area.



The decline of the docks stems from changed patterns in British trade. Liverpool traditionally served the Americas, and now the focus is more on Europe. With the switch to containers and the demise of the passenger trade, Liverpool suffered badly. Eight years ago the south docks closed.

Because of legal limitations it has not been in the interests of the company to sell the docks to a developer. Any money raised on sales would have to be paid to the bondholders in the original Docks Board. There was little point in selling when there was always the possibility that a lease could be negotiated which would bring in income to the company.

Eventually, a year ago Merseyside County Council negotiated a 150-year lease with the Mersey Docks and Harbour Company and the way was opened for development. Immediately, the council was approached by a number of developers, 20 knocking on the doors of county hall.

One set of docks—Albert, Canning and Salthouse—almost next to Pier Head, is already

under offer to Gerald Zisman Associates for a trade centre. And a consortium has proposed a massive development for the Queen's Dock which will include industry, housing, shopping, leisure and community interests. The most eye-catching aspect of its proposals is the proposal for 2m sq ft of office space contained in a single tower 1,336 ft high, one of the tallest buildings in Europe. The consortium believes such a development could generate between 30,000 and 60,000 jobs.

Any development that proposes jobs would obviously be looked at sympathetically in Liverpool. The city has an unemployment rate of over 12 per cent, twice the national average, and no sooner does its go-ahead development agency (an offshoot of Liverpool District Council) manage to attract more companies than a big closure is announced.

Last year 14 closures affecting more than 100 employees each time were announced, ranging from Dunlop's decision to close its tyre plant with the loss of 2,291 jobs, to the 100 lost by James A. Whittle, a building

firm. Others laying off workers included Pressed Steel Fisher (part of B.L.), Lyons Maid, Plessey and Meccano.

And now Massey Ferguson is considering closing its assembly plant at Knowsley (actually part of the city but in a different local authority area from Liverpool) at a cost of 550 jobs.

Despite all these setbacks unemployment rose only marginally last year. In January there were 40,138 out of work and by the end of 1979 the figure had risen to 40,630. In other words, the city had been attracting jobs almost as fast as it was losing them, a notable achievement.

Now this work by the district council, and the work the county is putting in, will be held up while deliberations continue about the role and functions of the urban development corporation. And until the docks are put right Liverpool will never regain full prosperity. Sir Kenneth says "the state of the docks is a cancer that has spread into the city. Until that is put right, the city will not recover."

At the moment the corporation has no name, no aims, no functions. It has just Mr. Young and Sir Kenneth Thompson. Mr. Heseltine has told them to go away and write the corporation's prospectus. He has given the same remit to Mr. Brookes and Mr. Mellish in London.

Responsibility

First task for Mr. Young and Sir Kenneth is to define their area. Liverpool's south docks cover about 300 acres. Sir Kenneth believes that the corporation will have responsibility for about 2,000. To encompass such an area it must take in the whole of the north docks, some of those in Bootle (part of Sefton District Council) and some in the Wirral (part of Wirral Council). Birkenhead across the Mersey (and in the Wirral).

After writing the prospectus, which has to be done quickly if the corporation is to open its doors on January 1 next year, the first crucial appointment will be that of a chief executive. Sir Kenneth envisages a small governing board for the corporation, perhaps no more than nine or ten strong, including the chief executive.

That man will have hundreds of millions—much of it from the Government—to spend over the next ten or 20 years. If he fails money will be wasted on a large scale and Liverpool's future development will be put back by a decade or more.

Viewpoint

The pessimists see the corporation taking a year or two to recruit staff, hire offices and draw up plans. By then a general election will be approaching. A Conservative Government, forced to trim spending to make way for more tax cuts, would then stall, say the critics. Plans would bog down in the Department of the Environment. The chief executive would resign in frustration, Sir Kenneth would retire, and the corporation would collapse.

By 1985, they believe, no more development will have taken place than there is today and another five years will have been wasted.

If the pessimists are right it will be a great shame because Liverpool is at last beginning to do things. A lot of commercial development is taking place in the centre of the city, a new urban public transport system has been started and there is a feeling of confidence in the air.

If the pessimists are wrong then the Merseyside Urban Development Corporation, or whatever name eventually emerges, could point the way forward for areas other than Liverpool and London's docklands.

Letters to the Editor

Productivity in steel

From Mr. P. Kille.
Sir,—I have just heard, yet again, Mr. Scholey of British Steel Corporation declaring that the unions will receive at least a 20 per cent increase on wages if only they would accept his plan of local productivity agreements. The unions have not yet now accepted this, and in my opinion will not do so, and I think I can see why.

From my experience and observations of the steel industry at Corby and at other works, very little control of productivity can be achieved through human agency. The speed of throughput, from ore to the sidings through to outputs from rolling mills is determined by machines and mechanical means and by the technical and physical nature of molten iron and steel.

Increased productivity is achieved right at the beginning, by increased orders, not by the men. Getting orders is the job of BSC management, not that of the men.

The unions must look on productivity agreements as a con trick. If BSC does not get orders it will not have a relatively fixed wages bill to pay, as such agreements will automatically reduce the wages cost, to the benefit of the company, but at the expense of men's living standards.

P. Kille.
8, Welford Grove,
Corby, Northants.

Civil Service pensions

From Mr. L. Bryant.
Sir,—Once again, Mr. Kendall is on the defensive regarding that section of the community forming an increasingly privileged group in respect of pension expectations.

He calculated that civil servants will themselves pay 57 per cent of the cost of civil service pensions for this year. Does he mean 57 per cent of pensions currently paid to a number significantly less than the civil servants of today; or does he mean 57 per cent of the total cost of providing inflation-proofed pensions for those currently employed?

Mr. Kendall said that inflation-proofed pensions can be had for money. Could he please give the name and business address of an actuary who is prepared to quote a figure for an inflation-proofed pension to be funded, so that the full liability is met even if the employer concerned subsequently goes out of business?

The reason that employees in the private sector cannot count on inflation-proofed pensions is quite simple: their employers cannot print money. The State can only guarantee inflation-proofed pensions to civil servants and others because it can tax the rest of us in order to do so and is not obliged to fund its commitments.

If civil service pensions continue to be indexed they should be indexed in accordance with the general level of pension increases which the private sector can afford. By the same token, the percentage contributions should be likewise comparable. Unless this is done and done quickly, there will develop a deep division within the nation which is undesirable, and unnecessary. Three-quarters

of a million civil servants are entitled to fairness and justice; so are 25m other employees. There should be reasonable comparability between the two. Civil servants duly obtained comparability in respect of earnings, but they are pushing their luck just too hard in respect of pension guarantees.

L. W. Bryant,
29, Kingsfield Avenue,
Kingsfish.

Index-linking arguments

From Mr. E. Brown.

Sir,—To end once and for all the arguments over index-linked pensions for local and central government employees including Ministers and MPs, there is one logical solution. Government introduction of legislation to stop them completely before the next increase due in 1981. In return, increase salaries in the public sector by the amount of the claimed average contribution, minus the average contribution of private sector employees without future index-linked pensions. Additionally, make a once and for all payment to current employees and pensioners of the extra amount they claim they have contributed since the introduction of this financially incalculable perk. Equate working conditions between the private and public sectors, i.e. retirement age, holidays and the length of the working week.

The Government could then invite the private sector pension fund industry to calculate the cost of index-linked pensions up to 5 per cent, 10 per cent or 15 per cent inflation, based on similar schemes in the private sector. Local and central government employees including MPs to be given a choice of making additional contributions to guarantee some indexing of their pensions but over 5 per cent the whole cost to be funded by themselves.

This will satisfy the vast majority of the wealth creators of our nation who rightly or wrongly consider there is an over-inflated fiddle of pension and other statistics by senior civil servants and their officials to justify their own ends. It will also give most taxpayers a feeling that justice has been done and that by reducing inflation at a stroke it will help the vast majority of private sector pensioners who have seen their incomes diminish at an ever increasing rate due to the inefficiencies of successive Governments.

When inflation has been reduced to a manageable level of around 2 per cent to 3 per cent, the Government of the day can then look at pensions on a national basis.

E. C. Brown,
17, Hawksworth Drive,
Merton,
Nr. Hiley,
W. Yorks.

Imports of textiles

From the National Office,

Association of Scientific, Technical and Managerial Staffs.
Sir,—The warnings (March 8) by Mr. Alan Clough, president of the Textile Institute, appear to show a growing sense of frustration by textile and clothing manufacturers who, to date, experiencing little interest and very little help with their problems from the European Commission. I believe a similar attitude is beginning to show itself

from our Government (made fibre and carpet imports).

If, as Mr. Clough suggests, textile manufacturers should consider producing abroad, one must ask is it not slightly hypocritical to shout from the rooftops "buy British," and then to move your manufacturing capacity to another country? What price to employment would this policy mean both for the United Kingdom, and indeed, Europe as a whole? We would surely find ourselves in a situation where the Government which is so fanatically committed to controlling the money supply, having to find more ready cash to pay for more unemployed.

Perhaps we should put John Bull first, and the Government produce a policy for proper import management and allow the textile industry to re-equip for the future.

Roger Beson,
East Road,
Longsight, Manchester.

Defence dilemma

From Mr. P. O'Brien.

Sir,—The logical conclusion to Britain's defence dilemma (article by Ian Davidson, March 11) is for the EEC to be taken one stage further and defence integrated with EEC finance. Ideally, the forces of each member country would be integrated into one force and foreign affairs be dealt with initially by the Council and later by a Cabinet drawn from the European Parliament.

If conscription were introduced on the French pattern and our youth served in mixed

Outsiders on the board

From Mr. J. Butcher.

Sir,—Like a series of Grand Old Dukes of York (or, Plaza Toros?), one entrepreneurial big shot after another has burst upon the British business scene, marched his company to the top of the market hill, only to find that there's a precipice there.

On the way up the institutional investors rush to join the ranks of the noble "Duke's" army, enjoying the spoils on the way. Sometimes there is a takeover battle and, while the sound of shot and shell rends the air, the noble duke, with his 123 acs deserted to the other side. At other times when the going has not been rough, the army of analysts have flogged their ammo to the nearest trooper and scurried off to join some other general.

In this game deserters don't get shot—but then neither do mutineers and it is a sad reflection on the men of the Life (Assurance) Guards and the Infantry Unit (Trust) etc. that they have never simply refused to let their "Duke" march another step until he has appointed a couple of able staff colonels to stop him charging into the Valley of Death.

Every company needs to have institutional investors who accept their responsibilities, one of which should be to take the lead in finding and appointing at least two non-executive directors (NEDs) to its board. I commend (Editorial, March 13) the U.S. practice whereby senior executives from non-competing companies take on this job. The trouble here is that it requires at least two days a month—and in critical times as many as two days a

week—to discharge the job adequately and the full time executive cannot do this. There must surely be many men with good experience, but more important lots of wisdom, who will be willing to work of this type for half a dozen or so non-competing companies, as their main activity.

But if the NEDs are doing a effective, if their only sanction is resignation. Assuming that the shareholders trust them, it is surely sensible for them to hold blank proxies calling for an extraordinary general meeting at any time they both think this necessary. One of the reasons why it is so difficult to curb the "Dukes" is that calling an egm requires 10 per cent of shareholders to requisition it and it is not easy to obtain this. The blank proxy would leave it for the NEDs to fill in the purpose of the meeting and would not be a proxy vote for the NEDs at that meeting.

But if the NEDs are doing a good job, calling an egm should not be necessary. They will need to have access to information on which to judge the performance of the company" (as you suggest) but must also satisfy themselves that the information is reliable and that they are getting the full picture. Not only must they be in contact with the senior management, especially on the financial side, but they will need to review matters with the auditors. Indeed one of their tasks may be to bring in new auditors if this is in the shareholders' interests.

John V. C. Butcher
16 Marsham Court
Marshall Street, SW1

units the integration of Europe would be achieved in a short time. The rationale and finance of defence would be more easily resolved. The effectiveness and economy of defence more likely. P. O'Brien.
51, Harpsford Avenue,
Virginia Water, Surrey.

Military threat

From Major General R. Mans.

Sir,—The weakness of Ian Davidson's logic in his article on our Defence Dilemma (March 11) was that he developed his argument from an almost entirely economic standpoint; omitting any mention at the outset of the military threat posed by the Soviet Union and its surrogates against the West.

Any realistic defence discussion must start with such an assessment otherwise one can be easily misled into believing the accuracy of some politically inspired intelligence evaluations which start from the premise of how much can we afford for defence, what will that buy in terms of men and equipment, and then a threat is manufactured to suit this capability.

The truth is that the threat faced by NATO is massive; comprising formidable and ever growing land, sea, air and missile forces. This great array is harnessed to an ideology dedicated to achieving the Soviet aim of world domination. Moreover, the doctrine that governs the employment of this power does not discount the use of any means, be they nuclear, chemical or conventional, in military operations.

In the light of these circumstances, the release of more land would be of no benefit and we can only have a vibrant inner city area if the means of communication are provided. David W. Bloomfield,
County and Suburban Properties,
33, Dorset Street, W1.

Looking at patents

From Dr. C. Oppenheim.

Sir,—A. H. Hermann's excellent survey of the problems of British patent classification (March 13) includes two erroneous statements made by the Patent Office. It is not true that the original British patent classification was devised to assist examiners assess for novelty; it was designed for the public's use—its use by examiners only occurred decades later. It is time the system returned to this original purpose—to serve the public.

It is nonsense to state that input time for computer coding is high. Retrieval systems are inflexible. All major information retrieval systems are now computerised and they work flexibly, efficiently and reasonably cheaply. That the Patent Office refuses to bring its system into the 20th century is bad enough, but to make lame excuses about "inflexibility" demonstrates how lacking in knowledge about current developments it is. A flexible and cheap computerised system would probably provide better retrieval than the Patent Office's present system, and at lower cost. What if it took to convince the Patent Office that it is time it had a re-think? Dr. C. Oppenheim,
The City University,
Northampton Square, EC1.

Dereliction in docklands

From Mr. D. Bloomfield.

Sir,—I must take issue with Mr. Staden of the Transport and General Workers' Union (March 12).

The problem, in London's docklands area, is not release of land, but provision of modern roads. The South Woodford to Barking relief road will not commence until 1982, and the East London river crossing is not programmed. The Southern relief road is a matter of considerable argument; again no action.

In the light of these circumstances, the release of more land would be of no benefit and we can only have a vibrant inner city area if the means of communication are provided.

David W. Bloomfield,
County and Suburban Properties,
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The City University,
Northampton Square, EC1.

Today's Events

Birmingham (until March 21).

Two-day seminar opens in European competition law, Royal Garden Hotel, London.

Overseas: Mr. Douglas Hurd, Foreign Minister, and Ministerial representatives from Australia, the U.S. and other countries, meet in Geneva to plan alternative Olympic Games.

EEC Finance Ministers meet in Brussels.

PARLIAMENTARY BUSINESS
House of Commons: Debate on Olympic Games.

House of Lords: Competition Bill and National Heritage Bill, third readings. Prevention of

Terrorism Order. British Aerospace Bill, committee (first day). Debate on road planning processes.

OFFICIAL STATISTICS
Balance of payments current account and overseas trade figures for February published by Department of Trade.

COMPANY MEETINGS
See Financial Diary on page 12.

COMPANY RESULTS
Final dividends: Beaton, Clark, BTR, James Fisher and Sons, Invergordon Distillers (Holdings), Pittard Group, Reliance PBWS, Interim dividends: Barratt Developments, R. Green Properties, Stothert and Pitt.

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INTERNATIONAL CAPITAL MARKETS

CURRENT INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
7ENEL	200	1987	7	5 1/2	100	Societe Generale	5.319*
Export Devel. Corp.	250	1985	5	14	100	Salomon Bros.	14.490
D-MARKS							
City of Oslo	80	1990	6 1/2	8 1/2	99 1/2	Deutsche Bank	8.789
FRENCH FRANCS							
TECSC	150	1986	6	14 1/2	99	Credit Lyonnais	14.511
SWISS FRANCS							
Swissair	30	1985	—	6 1/2	100	Credit Suisse	6.375
Swissair Meat Packers	30	1985	—	6 1/2	100	UBS	6.500
IBM World Trade Corp.	100	1986	—	6	100	SBC	6.000
IBB	80	1990	—	6	98 1/2	Soditic	6.206

* Not yet priced. † Final terms. ** Placement. † Floating rate note. ‡ Minimum. § Convertible. ¶ Registered with U.S. Securities and Exchange Commission. † Purchase Form. Note: Yields are calculated on AISD basis.

INTERNATIONAL BONDS BY FRANCIS GHILES

Challenge to hard currencies

INITIAL reaction among bond houses in Europe as to the effect of the latest set of anti-inflation measures announced by President Carter on Friday was cautious.

Bankers said that it was too early to forecast how dollar bonds would move but agreed that the hard currency sectors of the market were likely to be hard hit.

Where dollars were concerned, bankers said that the attraction for investors of short-term dollar deposits could prove irresistible. Not only is the return very high, especially if U.S. interest rates climb further as is widely forecast, but the currency itself stands to gain a lot from these measures.

Whether such strength is translated into any movement on the dollar bond front is nevertheless open to question. Logically short-dated straight dollar bonds should fall, but such a forecast ignores two points. First, few such bonds are held by U.S. institutions, the ones which might be squeezed for cash and have to sell.

Second, it is extremely difficult to find such paper, even at the current depressed prices.

Thus, shorter dated bond prices might well be marked down by dealers to bring the yield offered on such paper more into line with U.S. money market rates but it does not follow that there will be much real trading of such bonds.

What happens at the longer end is more difficult to predict. Most bond managers and dealers said that institutional clients would require at least until the middle of the week to assess the likely consequences of President Carter's latest set of anti-inflationary measures.

During the next few days what happens in the money

markets and to certificates of deposit (CDs) may well provide a more reliable guide as to the thinking of investors and banks. The heaviest impact of the Carter package is expected to fall on the harder currency sectors of the Eurobond market. That view is shared by bankers in Zurich, Frankfurt and London.

In the Swiss franc foreign bond market, where prices fell by at least two points last week, the heaviest impact of the Carter package is expected to fall on the harder currency sectors of the Eurobond market. That view is shared by bankers in Zurich, Frankfurt and London.

In the Deutsche Mark foreign bond sector there was more stability last week than for some time and towards the end of the week some dealers pointed to buying from abroad which affected good quality bonds whose yield had come close to 10 per cent.

German bankers remain nevertheless deeply pessimistic about the future and some echoed the conclusion of the weekly tele of Ross and Partners (Securities): "The old automatic rule of 'never a borrower but a lender of Deutsche Marks' must not be reversed to read 'ever a borrower but never a lender of Deutsche Marks'."

The Eurobond markets spent last week anxiously waiting for the Carter measures. A mild rally in straight dollar bonds at the beginning of the week quickly developed into a professional short covering scramble. As Kidder Peabody's weekly telex to investors put it: "The bond markets have

been mesmerised by the surge in short-term interest rates. Today, riskless returns of 18 1/2 per cent are available in the deposit market. Bond yields of 14-15 per cent make poor comparison when you have to live with daily gyrations of four and five points which rarely seem to be in one's favour."

Primary activity this side of the Atlantic was reduced to a trickle and by the end of the week the \$200m FRN for ENEL was the only new dollar bond issue on offer. The \$50m seven-year FRN for C. Itoh was quoted at a discount of 1 1/2 points before its pricing was fixed at par. It offers the higher even coupon on a new FRN note, 19 1/2.

The Yankee bond for Canada's Export Development Corporation finally appeared after being increased in size by \$50m from the initial \$200m. Salomon Brothers priced the issue, which carries a record coupon of 14 per cent, at par.

In the secondary market, bond prices steadied during the past few weeks. Foreign holders of D-Mark paper were still selling but some buying was in evidence, particularly in issues where yields of close to 10 per cent were available.

The major Swiss banks are continuing their informal agreement to stop new issue activity of public bonds. The postponement last week of two issues by smaller Swiss bank syndicates shows that other banks are falling in line. The public issue for the EIB, which is led by Soditic was cut back by SwFr 10m to SwFr 80m.

● To provide space for the full text of the Federal Reserve Board's statement, prices and other details given in the FT International Bond Service are not being published this week.

U.S. BONDS

Trading thin and volatile

By Our New York Staff

THE MARKET spent most of the week preparing itself for President Carter's economic package. Trading was thin and rather volatile, but it ended on an upbeat, which suggests that there was some hope that the measures would work. However, the details of the package were spaced out, starting only half an hour before trading closed on Friday afternoon, and with the bulk of the news of changes in credit policy following a couple of hours later. So the market has not yet had a chance to react fully.

Interest rates generally declined during the week. Short rates shed about half a point, with similar falls coming at the intermediate and long end. Although Fed funds were off slightly, that market was particularly hard to gauge, because the Fed supplied considerable amounts to meet seasonal needs. The desired trading range seemed to be 16 per cent to 17 per cent. Treasury bills set new record yields at last Monday's auction, but strengthened later in the week.

Apart from a string of leaks about the contents of Mr. Carter's package, the market had to contend with a number of developments. The prime rate climbed 4 per cent to 18 1/2 per cent, much as expected, and production figures pointed to a fair pace of underlying economic activity.

The money supply figures were mixed (M1A was down \$200m and M1B up \$200m). However M1B's annual growth rate of 8.6 per cent is still above the Fed's 4-6 per cent target. The Fed's report also showed that bank borrowing from the discount window soared by nearly \$1bn to a daily average of \$3.5bn in the week ending March 12. This would partially explain the 3 per cent selective discount rate increase contained in Mr. Carter's week-end package.

U.S. INTEREST RATES

	Week to	Week to
	Mar. 14	Mar. 7
3-month T. Bills	15.20	15.78
3-month Comm. Pap.	16.63	16.28
Fed. Funds	16.20	16.67
90-day T. Bills	12.19	12.57
Long-term AAA Utility	13.75	14.00
Long-term AA Ind.	13.13	13.75

Source: Salomon Bros. Estimate.

WALL STREET REACTION

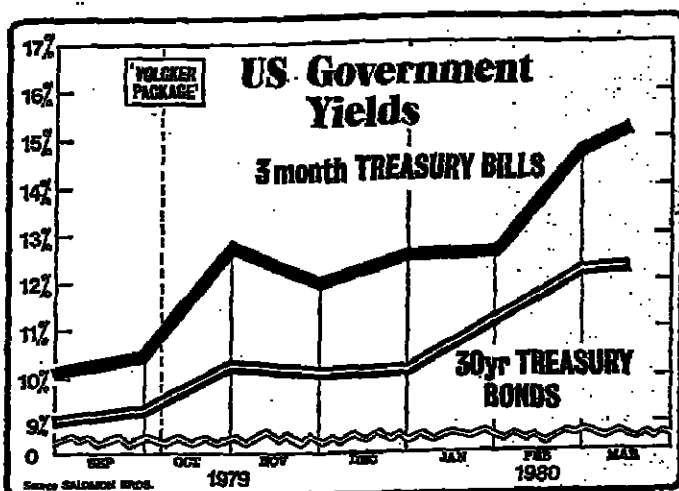
Higher short-term rates in prospect

BY DAVID LASCELLES

WALL STREET economic experts who were willing to comment over the weekend on President Carter's package said that the measures would push up short-term interest rates quite sharply. A 20 per cent prime rate (compared with last week's 18 1/2 per cent) is considered a virtual certainty before long. The more stringent reserve requirements will force banks to scramble for funds, and this is bound to drive up rates on key sources like certificates of deposit.

On the other hand, the measures could produce more stability in the deeply depressed bond market — quite how much depends on how Wall Street reacts in the next few days.

Most experts were, however, still treating the package warily over the weekend, reluctant to try to call the market when it opens today. Dr. Henry Kaufman, the economist at Salomon Brothers, who ranks among the most influential figures in the credit markets, said that the measures clearly put the burden on the monetary authorities and brought the peak in interest rates closer. But his considered verdict will



Not come until this afternoon, when he puts out a special issue of his weekly newsletter, Comments on Credit.

Mr. Walter Hoadley, the senior economist at Bank of America, described the package as "basically hopeful" and said that Mr. Carter had delivered a realistic economic message to the country. But he stressed that there are still so many uncertainties around that the Administration and the Fed will have to give the package a strong "follow through" if it is to work.

Mr. Hoadley welcomed the new credit measures, but commented that the real area where credit controls should be applied was to the Government's budget, and he was disappointed that there had not been any real effort to cut back government spending.

This view was shared by Mr. Erich Heinemann, money markets economist at Morgan Stanley, who complained that Mr. Carter had failed, probably for political reasons, to tackle

the problem of "transfer payments" like social security and pensions, which account for much of the increase in government spending. He also deplored the oil import fee because it raised government revenues and spared it the need to cut back. "They have not tightened their own belt."

Mr. Heinemann predicted that measures like the oil fee would force the Fed to accommodate the credit markets still further as prices continue to rise. He also believed that this would not be Mr. Carter's last anti-inflation package. Another would be necessary in the summer, he said, probably complete with wage and price controls.

Mr. Jeffrey Nichols, Economist at Argus, the Wall Street research firm, saw the package producing a sharp upward "spike" in short-term interest rates. But he commented that the lasting effect would depend on how much credibility Wall Street attached to the determination of the Administration and the Fed to fight inflation.

The past record was not very good, he said.

There were also doubts as to whether Congress would accept the proposed budget cuts.

MONEY MARKET FUNDS

Surging assets worry the Fed

BY STEWART FLEMING

FEARS ABOUT the remarkable growth of a relatively new form of financial intermediary, the Money Market Mutual Funds, have led the Federal Reserve Board to introduce measures aimed at curbing this growth as part of its credit restraint programme.

Money Market Mutual Funds are a creature of the 1970s, born out of high interest rates and inflation and the inability of small investors with less than a lump sum of \$10,000 to get the benefit of these high fixed interest returns in saving deposits at their commercial banks, and savings institutions. Government regulations limit

rate of interest that can be paid on regular pass book savings.

Money Market Mutual Funds began to be set up in the early 1970s but they grew only slowly. Even a year ago, their assets totalled \$10bn. They invested in money market instruments such as bank certificates of deposits which small savers on their own do not have access to.

As interest rates in the money market have soared in the past year, the rates of return which the funds have been able to offer investors, with as little as \$500, have increased dramatically to around 13 and 14 per cent and seem destined

to climb further.

Investors have been unable to resist the attractions of these high returns and money has been flooding in to the funds. By the end of February, their assets had grown to \$60bn, and they had more than doubled the established Mutual Funds which invest in ordinary shares.

More important, much of the money appears to have been draining out of bank accounts at smaller banks and savings institutions, increasing their financing problems and raising fears that the flow of small savings from them will become a flood.

Thus, the Federal Reserve

has acted to impose a 15 per cent non-interest bearing special deposit on increases in the assets of Money Market Mutual Funds after March 14. This will tend to reduce the rate of return which investors will obtain, making the Money Market Funds less attractive. They retain competitive advantages such as the ability of the investor to withdraw his money quickly and what will still be high rates of return, so it remains to be seen whether the Fed's move will contain their growth sufficiently to ease the pressures which are being created on other financial institutions.

Text of Federal Reserve statement

THE FOLLOWING is the text of the Federal Reserve Board's statement issued on Friday night:

The Board today announced a series of monetary and credit actions as part of a general program to restrain growth in the money supply and to bring inflationary pressures under control.

1.—A voluntary Special Credit Restraint Program that will apply to all domestic commercial banks, bank holding companies, business credit extended by finance companies, and credit unions to U.S. residents. The U.S. agencies and branches of foreign banks, the parents and affiliates of domestic banks, are urged to co-operate in similarly restricting their lending to U.S. companies. Special credit restraint programs for farmers and small businesses.

2.—A program of restraint on certain types of consumer credit, including credit cards, check credit overdraft plans, unsecured personal loans and secured credit where the proceeds are not used to finance the collateral. The Board has established a special deposit requirement of 15 per cent for all lenders on increases in covered types of credit. Automobile credit, credit for household goods such as furniture and appliances, home improvement loans and mortgage credit are not covered by the program.

3.—An increase from 8 per cent to 10 per cent in the marginal reserve requirement on the managed liabilities of large banks that was first imposed last October 6, and a reduction in the base upon which the reserve requirement is calculated.

4.—Restraint on the amount of credit raised by large non-member banks by establishing a special deposit requirement of 10 per cent on increases in their managed liabilities.

5.—Restraint on the rapid expansion of money market mutual funds by establishing a special deposit requirement of 15 per cent on increases in their total assets above the level of March 14.

6.—A surcharge on discount borrowings by large banks to discourage frequent use of the discount window and to speed bank adjustments in response to restraint on bank reserves. A surcharge of 3 percentage points will be levied on banks with deposits of \$500m or more for more than one week in a row or more than four weeks in a year.

The basic discount rate remains at 13 per cent.

In making the announcement, the Board said:

President Carter has announced a broad program of fiscal, energy, credit and other measures designed to moderate and reduce inflationary forces in a manner that can also lay the ground work for a return to stable economic growth.

Consistent with that objective and with the controlling intent of the Federal Reserve to restrain growth in money and credit during 1980, the Board has today announced a series of actions to restrain growth in the money supply and to bring inflationary pressures under control.

One consequence of strong demands for money and credit generated in part by inflationary forces and expectations has been to bring heavy pressure on credit and financial markets generally, with varying impacts on particular sectors of the economy. At the same time, restraint on growth in money and credit must be a fundamental part of the process of restoring stability. That restraint is, and will continue to be, based primarily on control of bank reserves and other traditional instruments of monetary policy.

However, the Federal Reserve Board also believes the effectiveness and speed with which appropriate restraint can be achieved without disruptive effects on credit markets will be facilitated by a more formal program of voluntary restraint by important financial institutions, realtors and oil companies, overdrafts and special checks, type credit plans; unsecured personal loans; loans for which the collateral is already owned by the borrower; special account and 30-day credit without

said increases in lending this year should generally be consistent with the announced growth range for money covered by the program.

Examples of consumer credit not covered are:

Secured credit where the security is purchased with the proceeds of the loans such as an automobile, mobile home, furniture or appliances, mortgage loans where the proceeds are used to purchase the home or for home improvements; insurance company policy loans, credit extended for utilities, health or educational services; credit extended under State or Federal Government programs; and savings deposits in passbook loans.

All creditors with \$2m or more of covered credit outstanding on March 14 must file a base report by April 1 directly with the Federal Reserve or through the Federal Reserve Bank Board or the Federal Credit Union Administration. This report will state the amount of credit outstanding on March 14 or a figure for the nearest available date.

Thereafter, these creditors must file a monthly report on the amount of covered consumer credit outstanding during the month, based on the daily average amount of credit outstanding if that data is available, or the amount outstanding on other appropriate dates.

The report will be submitted to the Federal Reserve Bank of the district in which the creditor is located. The first report for the period from March 15 through April 30 is due by May 12.

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The first 15 per cent deposit requirement must be maintained beginning May 22 on increases in outstanding credit.

MARGINAL RESERVE REQUIREMENT

The marginal reserve requirement established by the Board on October 6, 1979, on increases in managed liabilities that had been actively used to finance a rapid expansion in bank credit. The base for this reserve requirement was set at the larger of \$10m or the average amount of managed liabilities held by a member bank, an edge corporation, or a family of U.S. agencies and branches of foreign bank as of September 13-26.

Any increase in managed liabilities above the base period was subject to the additional 8 per cent reserve requirement.

Managed liabilities include large time deposits (\$100,000 or more) with maturities of less than a year, Euro-dollar borrowings, repurchase agreements against U.S. Government and federal agency securities, and federal funds borrowed from a non-member institution.

In today's action, the Board increased the reserve requirement to 10 per cent on increases in managed liabilities above the base amount. The base will be reduced to the extent a bank's foreign loans continue to decline. The minimum base amount remains at \$10m.

NON-MEMBER BANKS

The special deposit requirement for non-member banks is designed to restrain growth expansion in the same manner as the marginal reserve requirement on the managed liabilities of member banks.

For non-members, the base is the two-week period that ended March 12 or \$100m, whichever is greater. The 10 per cent special deposit will be maintained on increases in managed liabilities above the base amount. The base will be reduced to the extent a bank's foreign loans continue to decline. The minimum base amount remains at \$10m.

DISCOUNT RATE

In fixing the surcharge for large bank borrowing, the Board acted on requests from the directors of all 12 Federal Reserve Banks. The action is effective Monday. The discount rate is the interest rate that member banks are charged when they borrow from their district Federal Reserve Bank.

regard to whether a finance charge is imposed; credit secured by financial assets when the collateral is not purchased with the proceeds of the loan.

Examples of consumer credit not covered are:

Secured credit where the security is purchased with the proceeds of the loans such as an automobile, mobile home, furniture or appliances, mortgage loans where the proceeds are used to purchase the home or for home improvements; insurance company policy loans, credit extended for utilities, health or educational services; credit extended under State or Federal Government programs; and savings deposits in passbook loans.

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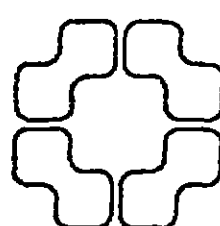
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This announcement appears as a matter of record only.



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Sint Maarten, Netherlands Antilles

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10% Bearer Notes 1980
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guaranteed unconditionally and irrevocably by
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F. van Lanschot Bankiers NV
Chase Manhattan Limited
Kredietbank International Group

March 17, 1980

التمويل

Higher prices and volume boost Svenska Cellulosa

BY VICTOR KATZETZ IN STOCKHOLM

SVENSKA CELLULOSE, Sweden's biggest forest products group, has reported pre-tax earnings of SKr 537m (\$125m) for 1979—nearly double the 1978 figure of SKr 273m, and comfortably above the October forecast of SKr 450m.

The proposed dividend of SKr 6.50 per share for 1979, up from SKr 5.50 following adjustment for last year's split, totals SKr 78m. Net adjusted return per share increased from SKr 13 to SKr 23.

Sales rose by 16 per cent to SKr 5.97bn (\$1.39bn). Operating profits climbed from SKr 307m to SKr 559m, as stock gains from SKr 17m to SKr 77m.

As a result of price increases and volume growth, the forestry and forest product sector raised its operating profit from SKr 92m in 1978 to SKr 307m last year, while sales rose 17 per cent to SKr 3.06bn.

Mölnlycke, a subsidiary that makes household paper and hospital products, improved its operating earnings from SKr 69m to SKr 79m, on sales of SKr 1.77bn, up 13 per cent. The Bakab power generating company had operating earnings of SKr 178m, up from SKr 125m, on sales that rose 21 per cent to SKr 415m.

Sunds Defibrator, the manu-

facturer of forest industry equipment, however, moved from an operating profit of SKr 12m to a loss of SKr 10m.

Earnings in 1980 will be at least the same as in 1979, SCA predicts, with Mölnlycke, Sunds Defibrator, Bakab and the packaging companies having excellent prospects of improving profits.

The forest sector will do decidedly better in the first half of 1980 than in the corresponding period of 1979, the preliminary report continues, but second half prospects for this sector are more difficult to predict.

Canadian Tire lifts earnings

By Robert Gibbons in Montreal

CANADIAN TIRE Corporation, the major Canadian merchandising group, increased its earnings by 27.2 per cent to C\$36.5m (U.S.\$31m), or C\$3.07 a share, in 1979, from C\$28.7m, or C\$2.49, a year earlier. Revenues rose by 17.3 per cent to C\$955m (U.S.\$794m), from C\$795m. The figures for each year exclude extraordinary gains.

Profit for the final quarter was equal to 61 cents a share against 55 cents. The group is the largest merchant of home and automobile equipment through franchised stores. In the present year, lower spending on new homes and cars is expected to shift volume to maintenance and upgrading, providing growth to the group's do-it-yourself products.

Sperry Univac semiconductor division plan

By John Lloyd

SPERRY UNIVAC, the computer products division of Sperry Corporation, is to establish a new semiconductor division, and plans a \$50m expansion in its integrated circuit capacity at Egan, Minnesota.

The new division will produce custom design semiconductors, but will continue to procure standard chips from external vendors. The chips will be produced solely for Sperry's own use.

The division will be headed by Mr. R. A. Ericsson, previously vice-president in charge of Sperry's device division.

Mr. Ericsson said that the new division would enable the company to make greater use of its research and development programmes, and that its establishment reflected the company's confidence in its technology.

Sandoz ahead in spite of inflation

By John Wicks in Zurich

GROUP PROFITS of the Sandoz chemical group rose by 10.9 per cent last year to SwFr 173m (\$88.3m). Earnings were adversely affected by inflationary pressures, which were offset only partially by higher selling prices. However, foreign-currency losses dropped from SwFr 127m to SwFr 62m, despite a further strengthening of the Swiss franc.

The cash-flow for the group, which, it was announced in January, increased its turnover by 3.4 per cent to SwFr 4.44bn (\$2.52bn), was up 5.3 per cent to SwFr 432m. Capital investments, down SwFr 28m to SwFr 207m, were financed entirely from a depreciation sum of SwFr 259m. Research and development spending was slightly higher, at SwFr 358m, the equivalent of 8.7 per cent of sales revenue.

Advance at Exxon-BHP venture in Bass Strait

BY JAMES FORTH IN SYDNEY

ESSO EXPLORATION and Production Australia, a 50 per cent partner with Broken Hill Proprietary Company in the Bass Strait oil and gas fields, lifted its profit 35 per cent from A\$87.8m to a record A\$119m (US\$130m) in 1979. The dividend to the U.S. parent, Exxon Corporation has been raised from A\$64m to A\$85.5m.

The improvement came from higher crude oil and liquefied petroleum gas (LPG) prices and record levels of crude, LPG and natural gas production, the directors said.

The return on the group's total average assets employed of A\$874m was 13.6 per cent. Exploration development and other capital expenditure totalled A\$109m, or almost as much as the group's profit, the directors pointed out. They

said that the incentive provided by the Australian Government's crude oil pricing policy led the company to increase significantly expenditure on exploration for oil and gas, which reached A\$55m. In addition the Exxon-BHP joint venture, an A\$133m on construction of a new Bass Strait production platform and associated plant and equipment.

This was A\$54m more than the partners spent in 1978. The partners' exploration and production plans for the Bass Strait over the next four years would cost another A\$120m.

The profit was after royalties, income and other taxes of A\$238m. The directors revealed that Esso had revalued its plant and equipment by A\$294m to reflect more clearly the current replacement cost of the assets.

CURRENCIES, MONEY and GOLD

Gold's soft centre

BY COLIN MILLHAM

IN THE eight weeks leading up to the peak of \$850 on January 21 gold rose by \$455, and in the same period since it has fallen by \$530. On Friday the metal opened at \$430, and fell quickly to \$427, the lowest level since Christmas Eve.

The January "gold rush" received great publicity as queues of eager coin buyers formed outside banks and jewellery stores were dispatched to the melting pot for scrap value. The media's interest in precious metals has not continued as values have fallen, but those encouraged to sink savings into gold earlier this year must rue the day.

Kryszewski was offered at \$370 and sovereigns at \$35 in

January, but last Friday prices were around \$240 and \$70 respectively. Gold's sharp fall—lost over \$30 last week—has been the result of several factors, including the tightening of controls on futures trading in the U.S. and the upsurge in world interest rates.

Borrowing money to buy gold is now very expensive in the U.S. and Europe. Since the beginning of the year U.S. bank prime lending rates have risen by 3 per cent to 18 per cent and above, while the rise in U.S. rates has made the dollar much more attractive from the point of view of investment.

Gold's earlier rise reflected growing tension in the Middle

East, and the doubling of oil prices in the last year. The resulting inflationary pressure on Western economies, led to a distrust of paper currency at a time when oil producers were receiving more money than ever before.

Almost inevitably some of these funds were turned into gold, and the effect on the bullion market was dramatic. Much higher U.S. interest rates, and hopes that the Carter Administration may become to grips with the problems of inflation, has changed the picture yet again.

The investment intentions of the oil producers will remain a major factor overhauling the bullion market, and another will

be the stability of the whole Middle East. The market had not recovered from the concern over Iran and the U.S. hostages when the Soviet Union invaded Afghanistan.

Although the underlying fears of confrontation between East and West remain, if the Russians leave Afghanistan and the hostages return to the U.S. gold is unlikely to fall very far because it has already fallen by over \$300 in less than two months. On the other hand another flash-point is likely to create a further rise, and on Friday afternoon the market showed signs of recovery on the statement that South Africa may withhold part of its gold production from the market.

OTHER CURRENCIES

	Mar. 14	2	5	Note Rates
Argentina Peso	5806-5886	1721-1728		26.80-26.95
Australia Dollar	2,091.5-2,095.5	0.9140-0.9145		67.50-68.00
Belgian Franc	102.55-102.55	46.50-46.50		12.62-12.70
Denmark Kr.	5.53-5.54	3.5503-3.5504		9.40-9.46
Finland Markka	5.53-5.54	3.5503-3.5504		9.40-9.46
French Franc	5.53-5.54	3.5503-3.5504		9.40-9.46
German DM	5.53-5.54	3.5503-3.5504		9.40-9.46
Irish Punt	5.53-5.54	3.5503-3.5504		9.40-9.46
Italian Lira	5.53-5.54	3.5503-3.5504		9.40-9.46
Japanese Yen	5.53-5.54	3.5503-3.5504		9.40-9.46
Swedish Krona	5.53-5.54	3.5503-3.5504		9.40-9.46
Swiss Franc	5.53-5.54	3.5503-3.5504		9.40-9.46
U.K. Pound	5.53-5.54	3.5503-3.5504		9.40-9.46
U.S. Dollar	5.53-5.54	3.5503-3.5504		9.40-9.46

Rate given for Argentina is free rate.

THE DOLLAR SPOT AND FORWARD

	Mar. 14	Start	Close	One month	% Three months	% Six months
UK	2.2015-2.2105	2.2100-2.2150	0.32-0.42c	0.32-0.42c	0.32-0.42c	0.32-0.42c
Canada	2.0710-2.0750	2.0700-2.0750	0.15-0.25c	0.15-0.25c	0.15-0.25c	0.15-0.25c
France	1.7780-1.7790	1.7780-1.7790	0.52-0.47c	0.52-0.47c	0.52-0.47c	0.52-0.47c
Germany	2.0140-2.0150	2.0140-2.0150	0.82-0.85c	0.82-0.85c	0.82-0.85c	0.82-0.85c
Belgium	2.24-2.25	2.24-2.25	0.5c	0.5c	0.5c	0.5c
Denmark	5.7285-5.7305	5.7285-5.7305	0.35-0.35c	0.35-0.35c	0.35-0.35c	0.35-0.35c
W. Ger.	1.5370-1.5380	1.5370-1.5380	0.55-0.55c	0.55-0.55c	0.55-0.55c	0.55-0.55c
Italy	853.50-854.50	853.50-854.50	0.50-0.50c	0.50-0.50c	0.50-0.50c	0.50-0.50c
Spain	68.50-69.50	68.50-69.50	0.70-0.70c	0.70-0.70c	0.70-0.70c	0.70-0.70c
Norway	5.5300-5.5350	5.5300-5.5350	0.25-0.25c	0.25-0.25c	0.25-0.25c	0.25-0.25c
Sweden	4.2780-4.2800	4.2780-4.2800	0.22-0.22c	0.22-0.22c	0.22-0.22c	0.22-0.22c
Japan	4.2780-4.2800	4.2780-4.2800	0.22-0.22c	0.22-0.22c	0.22-0.22c	0.22-0.22c
Switzerland	1.7480-1.7490	1.7480-1.7490	0.22-0.22c	0.22-0.22c	0.22-0.22c	0.22-0.22c

EURO-CURRENCY INTEREST RATES

The following nominal rates were quoted for London dollar certificates of deposit: one-month 15.55-15.65 per cent; three-months 15.80-15.90 per cent; six-months 15.90-16.00 per cent; one year 17.50-17.60 per cent.

	Mar. 14	Starting	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian \$	Japanese Yen
180 term	18.14-17	18.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11
90 term	17.14-17	17.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11
30 term	17.14-17	17.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11
180 term	17.14-17	17.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11
90 term	17.14-17	17.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11
30 term	17.14-17	17.14-18	8.14-8	10.14-14	2.14-2	7.14-7	12.14-14	17.14-18	16.14-16	10.14-11	10.14-11

Long-term Eurodollar two years 15.14-15.24 per cent; three years 15.14-15.24 per cent; four years 15.14-15.24 per cent; five years 15.14-15.24 per cent; six years 15.14-15.24 per cent; seven years 15.14-15.24 per cent; eight years 15.14-15.24 per cent; nine years 15.14-15.24 per cent; ten years 15.14-15.24 per cent.

LONDON MONEY RATES

	Mar. 14	Starting	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian \$	Japanese Yen
Overnight	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
1 day	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
7 days	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
1 month	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
3 months	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
6 months	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15
1 year	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15	15.14-15

Local authorities and finance houses seven days' notice, others seven days fixed. *Long-term local authority mortgage rate nominally three years 15.14-15.24 per cent; four years 15.14-15.24 per cent; five years 15.14-15.24 per cent; six years 15.14-15.24 per cent; seven years 15.14-15.24 per cent; eight years 15.14-15.24 per cent; nine years 15.14-15.24 per cent; ten years 15.14-15.24 per cent. Approximate selling rates for one-month Treasury bills 15.14-15.24 per cent; two-months 15.14-15.24 per cent; three-months 15.14-15.24 per cent; four-months 15.14-15.24 per cent; five-months 15.14-15.24 per cent; six-months 15.14-15.24 per cent; seven-months 15.14-15.24 per cent; eight-months 15.14-15.24 per cent; nine-months 15.14-15.24 per cent; one-year 15.14-15.24 per cent. Finance Houses Base Rates (published by the Finance Houses Association) 18 per cent from March 1, 1980. Clearing Bank Deposit Rates for sums at seven days' notice 15 per cent. Clearing Bank Rates for lending 17 per cent. Treasury Bills: Average tender rates of discount 11.12 per cent.

CURRENCY RATES

	Mar. 14	Bank	Special	European
Starling	17	0.800125	0.810004	0.810004
U.S.	17	1.56776	1.56811	1.56811
Canada	14	1.50794	1.50811	1.50811
Australia	14	1.50794	1.50811	1.50811
Belgium	13	32.2404	32.2404	32.2404
Denmark	13	7.46249	7.46249	7.46249
C.M.	13	3.55495	3.55495	3.55495
France	13	6.54988	6.54988	6.54988
Germany	13	1.56776	1.56811	1.56811
Italy	13	1.56776	1.56811	1.56811
Japan	13	6.47037	6.47037	6.47037
Norway	13	8.09368	8.09368	8.09368
Spain	13	1.56776	1.56811	1.56811
Sweden	13	2.46207	2.46207	2.46207
Switzerland	13	1.56776	1.56811	1.56811

Date	Announcement last year	Date	Announcement last year
*APV Mar. 27	Final 4.265	*Legal and Gen. Mar. 28	Final 4.194
*Advocate Apr. 11	Int. 3.55	*Lex Service Mar. 20	Final 2.7
*Armstrong Mar. 19	Int. 0.88	*Lilly Mar. 19	Final 1.676
*Asco Mar. 10	Final 1.58	*Liverpool Mar. 20	Final 5.098
*BBA Mar. 28	Final 1.794	*London Brick Apr. 5	Final 2.190
*BICC Apr. 2	Final 5.29	*Low Mar. 27	Final 1.615
*BSG Apr. 20	Final 1.454	*Lucas Inds. Mar. 27	Int. 2.567
*Babcock Int'l. Apr. 11	Final 2.5313	*Mancor Mar. 19	Final 0.67
*Bank of Scotland Apr. 3	Final 6.083	*Metal Mar. 19	Final 2.906
*Barclays Bk. Mar. 20	Final 7.41	*Mills and Allen Mar. 20	Int. 3
*Bejm Mar. 19	Int. 0.77	*Miner Apr. 10	Final 1.4193
*Bell (A.) Mar. 21	Int. 1.788	*Morgan Mar. 20	Final 2.227
*Blackwood Mar. 9	Final 1.282	*Mucklow (A. and J.) Mar. 26	Int. 1.32
*Blue Circle Apr. 19	Final 7.212	*Newman Mar. 23	Int. 1.5
*Booker Mar. 29	Final 3.952	*News Int'l. Mar. 29	Final 5.48
*Bovril Mar. 10	Final 0.771	*Ocean Mar. 20	Final 4.333
*Bowling Mar. 22	Final 2.348	*Pashco Apr. 4	Int. 1.0
*Brigsh Mar. 19	Final 60.00	*Pearson Apr. 18	Final 3.884
*British Aluminium Mar. 19	Final 5.00	*Peatman (S.) Apr. 18	Final 4.5956
*Brooke Bond Mar. 18	Int. 0.915	*Phillips Mar. 20	Final due
*Brown Boveri Mar. 10	Int. 3	*Ramsay Haffam Mar. 20	Final due
*Burton Apr. 5	Final 1.2	*Reed Mar. 20	Final 3.051
*Cape Inds. Apr. 1	Final 5.969	*Rockware Mar. 21	Final 3.67
*Carlson Inds. Mar. 26	Final 3.5	*Rowntree Mar. 20	Final 8.5
*Capita Int'l. Mar. 17	Final 1.5226	*Rugby Print. Apr. 14	Final 2.089
*Charterhouse Mar. 27	Final 0.2226	*Sampson Mar. 29	Int. 1.0
*Costas Bros. Mar. 29	Final 1.731	*Scottish Trust Apr. 10	Final 10.84
*Collins (Wm.) Mar. 15	Final 3.084	*Senior Mar. 15	Final 0.8516
*Comb. Eng. Apr. 10	Final 1.5055	*Slough Ests. Mar. 26	Final 1.529
*Combe Mar. 18	Final 1.2	*Smith and Stephew. Mar. 18	Final 1.780
*Coral Lure Mar. 12	Final 3.7	*Smith (W. H.) Apr. 11	Final 2.34
*Corda Int'l. Apr. 11	Final 1.348	*Smiths Inds. Apr. 10	Int. 3.6138
*Currys Apr. 27	Final 0.608	*Sons Mar. 18	Final 7.706
*Davy Apr. 19	Final 1.0262	*Staskey Mar. 20	Final 4.473
*Dayway Day Apr. 21	Int. 0.78	*Stevens Mar. 20	Final 1.35
*Deane Apr. 19	Final 2.86	*Sun Alliance Apr. 2	Final 11.505
*Dempster Star Apr. 11	Final 3.489	*Tarmac Apr. 28	Final 6.234
*Empire Apr. 12	Final 2.06	*Telegraph Apr. 5	Final 8.485
*Expanded Metal Mar. 19	Final 2.845	*Telephone Apr. 30	Final 4.802
*Fairclough Mar. 13	Final 2.0	*Tilling (T.) Mar. 19	Final 3.09
*Fraser Mar. 13	Final 1.519	*Tiremont Mar. 20	Final 0.637
*Gibbons (L.D. SWB) Apr. 2	Final 2.051	*Touche Mar. 13	Final 1.508
*Gilbey Mar. 22	Final 1.589	*Ud. Biscuits Mar. 13	Final 1.968
*Gill & Duffus Apr. 9	Int. 3	*Ward White Mar. 18	Final 2.68
*Glen Apr. 11	Int. 3	*Waverley Mar. 18	Final 1.05
*GORE Apr. 5	Final 4.641	*Weir Gp. Mar. 19	Final 3.85
*GRI Apr. 5	Final 16.25	*Willsaber Apr. 2	Final 6.84
*H&M Apr. 19	Final 6.271	*Wilmut Apr. 9	Final 2.241
*Hambro Life Apr. 9	Final 17.802	*Wolf Mar. 27	Final 0.789
*Hase Apr. 15	Final 4.5	*Woolsey Mar. 20	Int. 3.86
*Haweswater Apr. 18	Final 1.35	*Yorkshire Mar. 22	Final 2.44
*Herrison Apr. 1	Int. 1.5	*Z Mar. 22	Final 1.52
*Hewlett Apr. 11	Final 2.4578	*Board meeting Apr. 1	Final 1.52
*Hingham Apr. 9	Int. 0.58	*Board meeting Apr. 1	Final 1.52
*Housfield Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
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*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
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*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29	Final 3.457	*Board meeting Apr. 1	Final 1.52
*Housof Apr. 29</			

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Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

HOTELS AND CATERERS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

INDUSTRIALS (Misc.)

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

FOOD, GROCERIES, ETC.

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

ENGINEERING—Continued

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
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Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

ENGINEERING—Continued

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
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Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

ENGINEERING—Continued

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

FT SHARE INFORMATION SERVICE

FOREIGN BONDS & RAILS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

AMERICANS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

CANADIANS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

BANKS AND HIRE PURCHASE

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

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BANKS & HP—Continued

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
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Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

HIRE PURCHASE

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

BEERS, WINES AND SPIRITS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

BUILDING INDUSTRY, TIMBER AND ROADS

Stock	Price	Change	Stock	Price	Change
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
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Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12
Am. Sugar	21.00	+0.12	Am. Sugar	21.00	+0.12

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CHEMICALS, PLASTICS—Cont.

Stocks	Stock	Price	Last	Net	Chg	High	Low
Jan. 1	Croda Int. Ref.	26	22.10	13.37	3.17	25.00	21.00
Feb. 1	Croda Int. Ref.	15	16	15	1	17	14
Mar. 1	Croda Int. Ref.	15	15	15	0	16	14
Apr. 1	Oct. 15 & Everard	332	332	332	0	332	332
May 1	Oct. 15 & Everard	332	332	332	0	332	332
Jun. 1	Oct. 15 & Everard	332	332	332	0	332	332
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